

FM 71-3

ARMORED AND MECHANIZED INFANTRY BRIGADE

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HEADQUARTERS, DEPARTMENT OF THE ARMY

ARMORED AND MECHANIZED INFANTRY BRIGADE

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*This publication supersedes FM 71-3 (HTF), 25 July 1980.

PREFACE

FM 71-3 describes how the heavy brigade fights on the AirLand battlefield. Its contents are the result of careful and intensive coordination among the Armor School, the Infantry School, and the Combined Arms Center. It is for the heavy brigade commander and his experienced senior officers and noncommissioned officers.

This manual represents the most current thinking on how to employ the heavy brigade on the battlefield in relation to its higher headquarters, its subordinate units, and the threat array. It focuses on the brigade's organizational structure, command and control, tactical employment, combat support, and combat service support. It outlines synchronization of the assets attached or assigned to the heavy brigade.

In discussing these functions, however, this manual does not prescribe exact plans and procedures for accomplishing them. It is not a substitute for unit SOPs; rather, it provides a basis for their development. It is not intended to be a stand-alone document and does not repeat doctrine published elsewhere. A fundamental understanding of FM 100-5, FM 101-5, and FM 101-5-1 is a prerequisite for effective use of this manual.

The proponent for this publication is HQ TRADOC. Submit changes for improving the manual on DA Form 2028 (Recommended Changes to Publications and Blank Forms) directly to COMDT, USAARMS, ATTN: ATSB-CS-CAD, Fort Knox, KY 40121-5211.

The provisions of this publication are the subject of the following international agreements:

STANAG 2014	Operation Orders, Warning Orders and Administrative/Logistics Orders
STANAG 2029	Method of Describing Ground Locations, Areas and Boundaries
STANAG 2031	Proforma for Artillery Fire Plan
STANAG 2041	Operation Orders, Tables and Graphs for Road Movement
STANAG 2099	Fire Coordination in Support of Land Forces
STANAG 2147	Target Numbering System (Non-nuclear)
STANAG 2355	Procedures for the Employment of Helicopters in the Anti-armour Role
STANAG 2868	Land Force Tactical Doctrine – ATP-35(A)
STANAG 2963	Coordination of Field Artillery Delivered Scatterable Mines

The words "battalion" and "company" indicate the size of the command and control headquarters for those units. They are intended to be used interchangeably with "task force" and "team."

Unless otherwise stated, whenever the masculine gender is used, both men and women are included.

CHAPTER 1

INTRODUCTION

Armored and mechanized infantry brigades are organized to fight successful battles on any part of the battlefield and in conventional, nuclear, or chemical environments. They combine the efforts of their battalions to perform major tactical tasks as part of a division or

corps operation. The key to victory in the brigade battle is its ability to synchronize subordinate maneuver battalions and integrate combat support (CS) and combat service support (CSS) combat multipliers in support of the brigade effort.

Section I. MISSION, CAPABILITIES, AND LIMITATIONS

MISSION

The mission of the brigade is to close with and destroy enemy forces using its mobility, firepower, and shock effect. It defeats enemy assault by defensive fires, obstacles, and counterattacks.

CAPABILITIES

The armor or mechanized infantry brigade is organized to perform tactical tasks under the command of a division or corps headquarters. The division commander assigns varying numbers of armor and mechanized infantry battalions to the divisional brigade for a specific mission. Additional combat, CS, and CSS units are task organized to the brigade as necessary.

Separate brigades have fixed organizations that include combat, CS, and CSS units.

The brigade accomplishes the mission(s) assigned by the higher headquarters and conforms to that commander's intent. Brigades do not act independently but as part of a division or corps that conducts operations to attain operational goals.

Heavy brigades apply their combined arms, mobility, firepower, and shock effect to—

- Conduct sustained combat operations in all environments.
- Accomplish rapid movement and deep penetrations.
- Exploit success and pursue a defeated enemy as part of a larger formation.

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- Conduct security operations (advance, flank, or rear guard) for a larger force.
- Conduct defensive operations or delay in sector over large areas.
- Conduct offensive operations.

LIMITATIONS

Due to the density of organic track vehicles, the heavy brigade also has the following limitations:

- Dense jungles and forests, steep and rugged terrain, and significant water obstacles restrict mobility.
- Urbanized terrain impedes maneuver.
- Substantial quantities of heavy equipment limit strategic mobility.

- The heavy brigade consumes more supplies from Classes III, V, and IX.

Separate brigades require augmentation for certain independent missions because of their limited organic assets. These limitations include —

- Only six armored vehicle launched bridges (AVLB) available for bridging in the brigade combat engineer company.
- Only one platoon of Stinger air defense (AD) weapons.
- Shortages of transportation, ammunition transfer, and graves registration capability.

Section II. AIRLAND BATTLEFIELD

The AirLand battlefield is generally divided into three areas of operations: deep, close, and rear. Deep, close, and rear operations are inseparable. Deep and rear operations are essential to winning close operations. The AirLand battle commander develops his intent and accepts risks to achieve decisive results. He secures the initiative and conducts offensive action aimed at imposing his will on the enemy. The objectives of his maneuver are to position strength against weakness, throw the enemy off balance, and aggressively follow up to complete the enemy's defeat and destruction.

The brigade commander must understand the intent of the division commander and the corps commander as a whole so he can properly employ his forces. Brigade tactics emphasize the use of firepower and maneuver to destroy first-echelon regiments while delaying or disrupting second-echelon regiments.

Characteristics of weather and terrain affect movement, fields of fire, and communications on any battlefield; however, the tenets of the AirLand battle will apply whenever an echeloned Threat force is faced. This holds true in the defense and the offense and when using conventional, nuclear, and chemical weapon systems.

Initiative is the ability to set the terms of the battle by action. It implies an offensive spirit when conducting an operation. To do this, the brigade commander trains subordinates to take risks and to be bold, innovative, and aggressive. By understanding the intent of the corps and division commanders, the brigade commander may confidently operate with the mission-type orders and boldly exploit success. The brigade commander sets the terms of battle by—

- Making an estimate of the situation to quickly provide the essentials of the tactical situation.
- Establishing a rapid decision-making process that translates these essentials into clear, concise orders to subordinate battalion commanders and staff.
- Reviewing the intelligence preparation of the battlefield (IPB) to confirm and establish the decision points (DP) and establish the brigade's priority intelligence requirements (PIR).
- Designing tactical plans to provide a reserve force poised to decisively influence the successful battle.

Depth is measured in time, space, and resources. Brigade commanders use the entire depth of the battlefield to strike the enemy. They do this to prevent the enemy from concentrating firepower and disrupting friendly forces. The brigade level commander uses depth by—

- Using engineer, fire support, air defense artillery (ADA), electronic warfare (EW), and attack helicopter assets to isolate enemy formations and break up their mutual support.
- Developing comprehensive plans for the security of the brigade rear area against Levels I, II, and III rear area threats.
- Employing formations that enhance depth, security, and agility.
- Attacking the enemy beyond the forward edge of the battle area (FEBA) with indirect fire and EW.
- Using smoke to isolate enemy units and degrade their target acquisition.
- Developing a logistics plan to support brigade operations.

Agility requires flexible organizations and quick-minded, flexible leaders who can act faster than the enemy. At brigade level, this means—

- Clearly defining responsibilities among the tactical command post (TAC CP), the tactical operations center (TOC), and the rear command post (CP) to streamline command and control (C2) and reduce decision-making time.
- Positioning the TAC CP and the command group forward to better see and control the battle.
- Using IPB to predict probable enemy intentions and enable the brigade commander to operate within the enemy decision cycle.
- Using well-defined standing operating procedures (SOP) to provide accurate reporting and rapid reaction on the battlefield. This includes adjusting CSS assets when the maneuver plan or task organization changes.
- Developing contingency plans to reduce decision-making time.
- Training brigade staff and battalions to respond quickly to changing situations with minimum

guidance, remaining consistent with the commander's intent.

Synchronization of operations is required to obtain maximum combat power from the combined arms team. It requires a command, control, and communications (C3) system that can mass and focus the combat power of the brigade at the decisive time and place. Brigades synchronize their operations by—

- Completing an extensive IPB to include the decision support template (DST).
- Designating and resourcing the brigade main effort.
- Coordinating and integrating CS and CSS assets.
- Using the logistics estimate to ensure adequate resources are available and allocated.
- Rapidly massing combat power to achieve local surprise and shock effect without lengthy explanations or orders.
- Planning in advance to exploit the opportunities created by tactical success.
- Allowing decentralized operations.
- Using smoke to conceal maneuver and allow massing of combat power.

Inherent in AirLand battle is the simultaneous attack of enemy forward forces, the defeat of enemy elements in our rear areas, and the deep attack of follow-on echelons. The brigade's primary focus is to conduct close operations to defeat the enemy while protecting its CS, CSS, and C2 facilities through effective rear operations. The brigade must be poised to exploit every opportunity to disrupt the enemy timetable by combining fires, barriers, and maneuver during deep, close, and rear operations. Whether attacking or defending, timely and well-executed deep maneuver against enemy forces not yet in contact is an important element of operations.

Deep operations open opportunities for decisive action by reducing the enemy's closure rate and creating periods of friendly superiority to gain or retain the initiative. Deep operations are based on a thorough, continuing IPB and timely intelligence from organic and higher level sources. High-payoff targets are identified, and organic and supporting attack assets synchronized.

The brigade primarily conducts deep operations through air and artillery interdiction. Conventional military forces can also be used to interdict enemy

movement in depth through deep attack. Offensive EW systems do not have the range to hit deep targets. Deception can also be used to delay and disrupt.

Section III. BRIGADE BATTLEFIELD FOCUS

Whether attacking or defending, each echelon of command must create the time and space necessary for its major subordinate echelons to defeat enemy forces in contact before engaging those not yet in contact. This is done by attacking deeper enemy echelons to delay, disrupt, and destroy them before they can affect operations of subordinates. The subordinate commander may request the superior commander to take specific

measures against deeper enemy forces, normally in the subordinate's area of interest. The subordinate commander should also specify what he wants done to the enemy formation: delay for a specific time, canalize along a specific avenue of approach, or defeat in a specific area. Figure 1-1 places the echelons of command in a framework relative to their strategic, operational, and tactical roles on the battlefield.

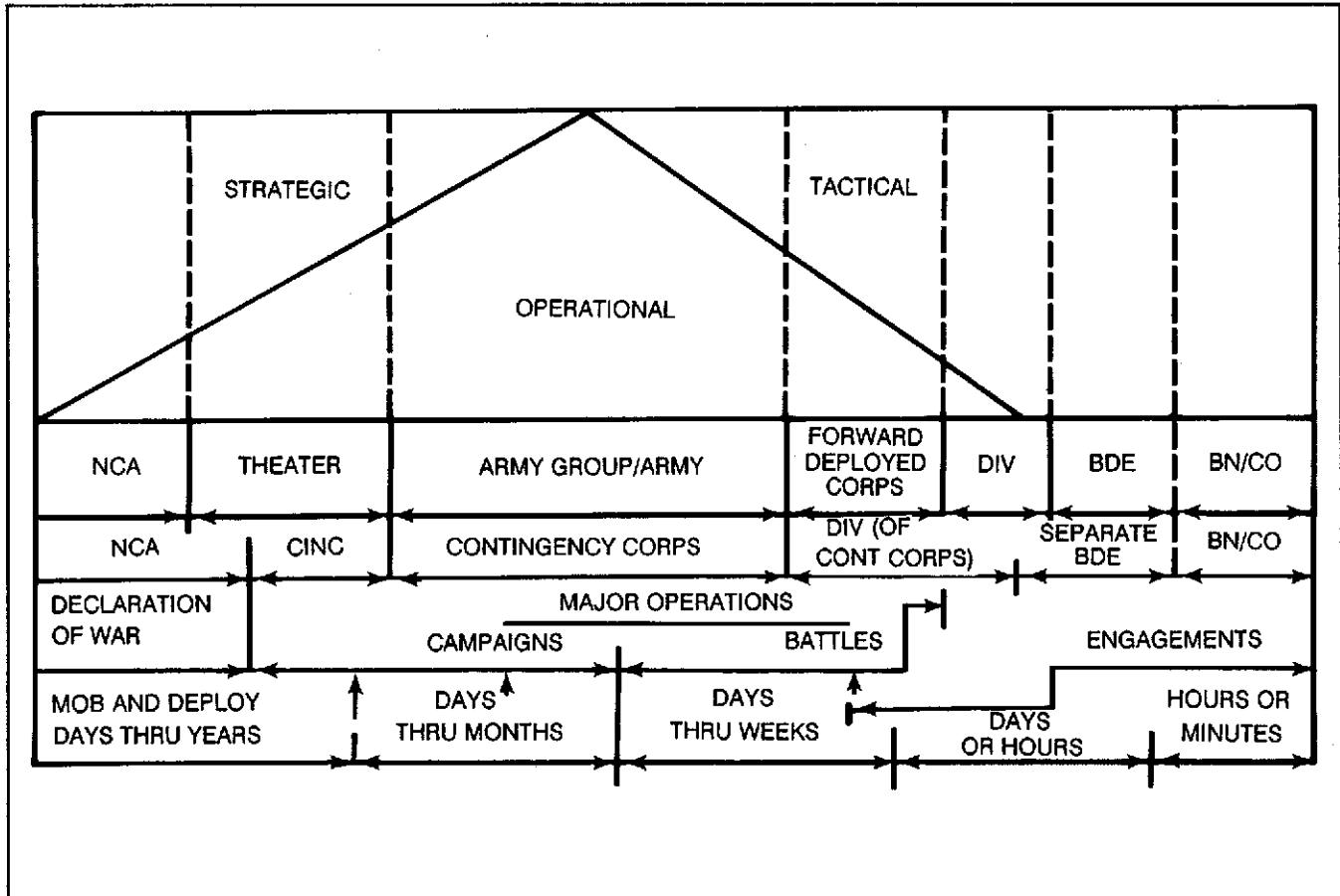


Figure 1-1. Structure of Modern Warfare and Echelons of Command.

While divisions are capable of independent operations, they normally fight as parts of corps. Divisions plan and allocate resources for operations up to 48 hours in the future. On most terrain, forces that can affect those operations generally are located within 70 kilometers (km) of division positions. Divisions defend against one or more assaulting enemy divisions. The defending division commander directs, coordinates, and supports operations of his brigades against assaulting regiments. The division interdicts follow-on regiments to disrupt and delay those forces as they attempt to join the battle. When attacking, the division commander directs, coordinates, and supports operations of his brigades against enemy battalions and regiments. The division interdicts deeper enemy echelons, reserves, and CS forces—that can affect operations of its brigades. Divisions suppress enemy air defenses as an essential part of attack helicopter and offensive air support operations. Divisions integrate EW operations with fire and maneuver.

Most brigades are divisional and normally fight as part of a division. Separate brigades are organized for and are capable of conducting sustained operations under corps control. In either case, brigades most

often fight as parts of divisions. Divisional brigades are tactical headquarters that control mission-tailored battalion task forces (TF). Brigades can direct battles against enemy battalions and regiments up to 15 km forward of the forward line of own troops (FLOT) by controlling TFs and attack helicopter units, by establishing priorities of supporting artillery fires, and by coordinating United States Air Force (USAF) close air support (CAS) operations.

The brigade influences the battle mainly through task organization of the TFs, assigning missions and sectors, applying force multipliers, assigning and shifting priorities of CS and CSS assets, and constituting and committing the reserve. The TF fights the battle through synchronization of the combined arms team.

Battalion is the lowest echelon at which firepower, maneuver, intelligence, and support are combined under a single commander. Battalions, normally task organized as battalion TFs, fight as parts of brigades. Battalions normally fight enemy forces they can see and shoot at; this defines an area of influence extending from less than 100 meters in forests, urban areas, or close terrain, out to about 5 km from the battalion direct-fire weapon systems.

Section IV. ORGANIZATION AND FUNCTIONS

An armored or mechanized infantry brigade is a combination of tank and mechanized battalion TFs and other supporting units grouped under the command of a brigade headquarters. It participates in division or corps operations according to the principles and concepts set forth in FM 100-5 and FM 71-100.

DIVISIONAL BRIGADES

Close combat-heavy brigades are the major subordinate maneuver commands of armored and mechanized infantry divisions. The only permanent unit assigned to a brigade is its headquarters and headquarters company (HHC). The HHC provides direction and control over units assigned to, attached to, or supporting the brigade.

Divisional tank and mechanized infantry battalions are attached to brigades by the division commander

based on his estimate of the situation for a specific mission. As a rule, each brigade can control two to five battalions and supporting CS and CSS elements. When it is necessary to concentrate forces, the division commander may determine that more battalions are necessary; however, as the battle increases in intensity, the brigade commander's span of control must be limited to a controllable number of battalions, generally not more than four.

With the addition of light infantry divisions to the force structure, the division commander may attach light infantry battalions to the heavy brigade for specific missions and for a short duration. Use of light forces requires careful consideration of key employment and logistics support principles described in the appendix.

While the divisional brigade has no fixed slice of CS and CSS assets, it usually operates with a proportional

share of the division's assets. Combined arms operations are conducted whenever appropriate. Normally, support is provided by a direct support (DS) field artillery (FA) battalion, an ADA battery, an engineer company, a forward area signal platoon, a military police (MP) platoon, combat intelligence and electronic warfare (IEW) elements, a tactical air control party (TACP), and a division support command (DISCOM) forward support battalion (FSB). Attack helicopter units may also operate with the brigade. If sorties are allocated for planning, USAF tactical air operations support the brigade.

SEPARATE BRIGADES

Since separate brigades conduct operations under corps command, they are organized to provide their own support. Units organic to the separate brigade include—

- A brigade HHC to provide C2 and limited CS assets to include MP, chemical, and AD elements.
- Tank and mechanized battalions to fight battles, destroy or disrupt enemy forces, and seize and hold terrain.

- An armored cavalry troop for reconnaissance, security, and economy-of-force operations.
- A direct support FA battalion to provide fire support.
- An engineer company for combat engineer support.
- A military intelligence (MI) company to assist in collecting, processing, and disseminating intelligence, and to support EW operations.
- A support battalion of several support units to provide CSS in the same way the DISCOM provides an FSB to give CSS to divisional brigades but with the added ability to link directly with corps support command (COSCOM) for augmentation.

Additional combat, CS, and CSS units may be attached to a separate brigade as required by the brigade's mission and operating circumstances. The separate brigade may be attached to a division (less support) but is usually controlled by a corps.

CHAPTER 2

COMMAND, CONTROL, AND COMMUNICATIONS

AirLand battle demands a responsive C2 system that protects the force, motivates the soldier to fight, and eases execution of broad mission orders and tactics.

Brigades and battalions perform similar C2 functions

in that they plan, allocate resources, and fight combined arms units. While the same basic planning procedures and processes are used at both levels, the brigade commander's role differs significantly from the battalion commander's (see Table 2-1).

<u>FUNCTIONS</u>	<u>BRIGADE</u>	<u>BATTALION</u>
Planning	Assigns broad missions and tasks Allocates combat multipliers, and fits force to ground	Executes more specific missions using detailed procedures Applies resources
Execution	Integrates all combat multipliers into battle Conducts initial deep operations Monitors the battle (commander's personal presence is limited to the main effort) Commits the reserve to decide the battle or exploit opportunity (immediately reconstitutes a reserve)	Fights with less variety of multipliers Fights close operation Commander physically sees the battle Positions companies in depth (normally retains a reserve)
Coordination	Coordinates with many outside units within brigade area (synchronizes combat and CS assets) Controls rear operations	Coordinates organic, attached units Participates in rear operations

Table 2-1. Command and Control Functions.

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The brigade's C2 facilities are more elaborate than the battalion's. This is caused by the larger area of responsibility, the diverse units occupying that area, and the requirement to control rear operations.

The unit's tasks are executed through a C2 system consisting of three interrelated components: the C2 process, organization, and facilities. The extent and variety of the tasks confronting a brigade commander re-

quire the cooperative endeavors of many people, the integration of many complex equipment systems, and a sensible division of work.

The tempo of operation at brigade level is faster paced than at higher echelons. Staff planning and estimate processes tend to be informal to meet time constraints. Proper planning processes are not discarded but are conducted verbally or mentally rather than formally.

Section I. COMMAND AND CONTROL PROCESS

The brigade C2 process is one of planning, directing, coordinating, and controlling the battle. The process centers around assigning missions and tasks to subordinate and supporting elements to accomplish an assigned mission. The process consists of—

● Planning.

- Make an estimate of the situation.
- Determine a concept of the operation that accomplishes the corps and division commanders' intents and the brigade's assigned missions and tasks.
- Assign missions and tasks to subordinate maneuver battalions to accomplish the brigade mission.
- Task organize to give TFs the maneuver and CS elements they need to execute their missions.
- Assign missions and tasks to CS elements to support the brigade mission.
- Allocate space to subordinate and supporting elements.
- Continue planning contingency and implied follow-on missions.

● Directing.

- Issue the order with a clear statement of the brigade commander's intent.
- Position command, control, communications, and intelligence (C3I) resources to facilitate

fighting the battle in the brigade area of operations.

- Execute planned deep attacks using fire support and EW assets available from division.
- Shift CS assets and priorities, adjust tasks of subordinates, and focus the effort of the brigade in close operations.
- Commit the brigade reserve to strike the decisive blows to defeat the enemy.

● Coordinating.

- Manage land use.
- Produce and disseminate operation orders (OPORD) and graphics, plans, fragmentary orders (FRAGO), and other written and oral directives.
- Request, receive, emplace, brief, and task additional assets from higher headquarters to support brigade and subordinate battalion operations.
- Synchronize subtasks such as joint air attack team (JAAT), counterreconnaissance, and countermobility operations.
- Support subordinate requirements, manage problems with adjacent units, and ensure higher headquarters is informed of brigade plans and intent.
- Send liaison officers (LO) to higher and adjacent headquarters.

- Controlling.
 - Conduct follow-up visits and inspections of preparations.
 - Receive, consolidate, process, and forward status reports and requests for support.
 - Receive briefbacks and observe selected rehearsals of the operation by subordinates.
 - Maintain situation maps (SITMAP), monitor battle progress, anticipate changing situations, and direct appropriate changes.
 - Feel the tempo of battle, and take those actions necessary to win.

The following key considerations affect the brigade's C2 process:

- Lead times for decision making require the commander to think ahead. Even such relatively responsive actions as the movement of the attack helicopters or shifting of artillery fires require the ability to forecast battle developments.
- Decentralized execution and coordination are the norm. Selection of the locations for obstacles in hasty defensive operations, artillery targets to disrupt enemy formations, and positioning of short-range air defense (SHORAD) elements to protect maneuver units are coordinated at battalion TF and company team levels.
- Operations security (OPSEC) and tactical deception measures that hide the commander's concept from the enemy commander are important considerations of the C2 process.
- Terrain and movement management is crucial.
- Planning and coordinating the reserve commitment are a main focus of the brigade's C2 effort. Reserve commitment is a personal decision made by the brigade commander and may be the most important decision that he makes. The reserve commitment must be immediately reported to the division commander, and action must be generated to reconstitute a new one from uncommitted assets.

Table 2-2 illustrates the brigade's synchnonization of combat operating systems throughout the battlefield.

<u>OPERATIONS</u>	<u>REAR</u>	<u>CLOSE</u>	<u>DEEP</u>
Intelligence	PIR: Where/when threat airborne, air assault IPB	PIR: Location of threat 2d echelon IPB	EW disrupts enemy C3I IPB
Maneuver	OO rear threat	Reserve, main attack, follow and support, supporting attack, defend, delay	
Aviation	Respond to rear threat	JAAT and CAS on EAs	BAI, JAAT, Army aviation attack 2d echelon threat units; deliver FASCAM
Fire support	Plan fires to support rear opns	Fires to support maneuver; SEAD Strip away recon	Interdict 2d echelon SEAD FASCAM on EAs to support deep opns
Air defense	Passive AD	Combined arms active defense; Mixing/Massing of ADA	Early warning
Mobility/Counter mobility	Survivability of key logistics facilities	Mobility for maneuver and MSR Survivability fighting vehicles, CPs	FASCAM on EAs, choke points
Nuclear, biological, chemical	Deliberate decon	Smoke for deception; Smoke on obj; NBC recon; Hasty decon	Smoke to disrupt, isolate echelons
Combat support and combat service support	Sustains the fight; Plans for future opns, reconstitution	Medical treatment and evac; Battlefield circulation; EPW evac and control; Maint teams flx fwd	
Command and control	Bde rear CP: Ensures sustained battle	Bde main CP: Synchronizes CS and CSS; Fights rear opns; Plans close, deep opns; Monitors close fight Bde TAC CP: Fights close fight Tactical deception	

Table 2-2. Brigade Synchronization Matrix.

Section II. COMMAND AND CONTROL FACILITIES

Brigades are controlled from echeloned C2 facilities with varying levels of staff participation at each echelon. The facilities include a TAC CP, main CP, and rear CP.

COMMAND GROUP

The command group is the brigade commander and people he selects to assist him to command and control the battle during critical periods. Being highly mobile, the command group moves to a position that allows the commander to observe the battlefield, issue appropriate orders at critical times, and influence the battle with his personal presence.

TAC CP

The TAC CP conducts ongoing close operations. It is located well forward in the brigade area of operations to facilitate communications with subordinate commanders. It is highly mobile and can rely on frequent displacement, small size, and comparatively low electronic signature to provide security. Only the key representatives of the command and current operations section are present at the TAC CP. They provide the commander with combat critical information and disseminate his decisions concerning CS and CSS to the main CP for implementation.

MAIN CP

The main CP plans future operations; executes planned deep attacks; and coordinates combat, CS, and CSS requirements and directives from the brigade commander. It coordinates operations throughout the depth of the brigade sector. The main CP is the central location of the current operations, plans, intelligence, fire support, and Army airspace command and control (A2C2) sections. The operations support section is represented at the main CP. The larger size, more elaborate communications, and greater electronic signature require more elaborate security precautions for the main CP.

REAR CP

The rear CP sustains current operations, forecasts future CSS requirements, conducts detailed CSS planning, and serves as the entry point for units entering the brigade rear area. The operations support section is located at the rear CP. Collocated with the FSB CP in the brigade support area (BSA), the rear CP is under the operational control (OPCON) of the FSB commander for defense of the BSA.

Section III. COMMAND AND CONTROL ORGANIZATION

The brigade staff working within these CPs is composed of coordinating, personal, and special staffs. Coordinating staff officers are the commander's main staff assistants. They assist the commander by coordinating the plans and operations of the brigade. Collectively, they have responsibility for the commander's entire breadth of responsibility, except those areas reserved for special staff officers. See FM 101-5 for specific duties of coordinating, personal, and special staff officers.

BRIGADE COMMANDER

The brigade commander analyzes and restates the mission, designs the concept of operations, organizes

the forces, determines the main effort, transmits his own and the higher commander's intent, and provides support to subordinate units. The brigade commander controls the ongoing battle and provides planning guidance for future operations. He positions himself to follow and influence operations and maintains communications with higher, lower, and adjacent units. The commander must be totally mobile and must not depend on a fixed site, CP, or specific vehicle to exercise his C2 responsibilities. He reacts immediately to direction from his higher commander to release and receive forces. When his organization or mission changes, he reorganizes as needed. Teamwork, functional SOPs, and a clear

understanding of the mission permit his subordinates to quickly translate a broad mission order into action.

PERSONAL STAFF

Deputy Commander

In the separate brigade, a deputy commander is authorized to assist the commander in the performance of his duties. The deputy commander is kept informed of operations, plans, intentions, goals, and problems so he can assume command at any time. The deputy commander normally operates within specific areas defined by the commander. These areas may include responsibility for the operation of the BSA, logistics support of the operation, coordination and execution of rear operations, and TOC-BSA interface.

Executive Officer (XO)

The XO performs a variety of functions for the commander. He is responsible for assignment of tasks and for the efficient, coordinated, prompt response of the staff in support of the commander. The XO supervises the main CP. He is responsible for the operation of the TOC. The XO directs and coordinates CS in consonance with the commander's plan and ensures continuous CSS. He remains current on the tactical situation and prepares to assume command on a moment's notice. In the separate brigade, the XO acts as the chief of staff. The XO is involved in rear operations because of his duties of coordinating the staffs of the main and rear CPs.

Command Sergeant Major (CSM)

The brigade CSM's primary role is to advise the brigade commander on matters concerning the soldiers of the brigade. He is not an administrator, but he understands the administrative, logistics, and operational requirements of the brigade. He is the most experienced enlisted soldier in the brigade and keeps his finger on the pulse of the command. The CSM receives taskings from the brigade commander and acts as a troubleshooter. He focuses attention on functions critical to the success of the operation.

COORDINATING STAFF

Adjutant (S1)

The S1 normally operates in the brigade operations support section located in the BSA with the S4 section.

He is responsible to the brigade commander for the maintenance of unit strength, personnel, morale, discipline, and law and order. He supervises and coordinates various special staff sections including those of the public affairs officer (PAO), chaplain, and surgeon. He is a point of contact for other activities including the inspector general (IG), civil affairs, and judge advocate general (JAG). In the separate brigade, the S1 also serves as the adjutant general. The S1 and S4 sections cross-train to enable them to conduct continuous operations.

Intelligence Officer (S2)

The S2 normally remains at the TOC where he has the communications assets to coordinate intelligence activities. He keeps the commander, XO, and staff updated on the enemy situation and works closely with the fire support officer (FSO) and assistant S3 to ensure information is passed between the staff.

Operations and Training Officer (S3)

The S3 is the commander's main assistant for matters pertaining to the organization, employment, and operations of the brigade and CS elements. He assists the commander in fighting the ongoing battle. The S3, through the brigade TOC, coordinates closely with the S4 to keep abreast of the current CSS status.

Supply Officer (S4)

The S4 provides logistics information to the commander and functions as the brigade's logistics planner. He coordinates with the battalion XOs and S4s about the status of equipment and supplies. The S4 has representatives in both the main and rear CPs. The S4 personally participates in the planning process when it occurs. The S4 coordinates with the FSB commander and support operations officer to ensure the brigade commander's logistics priorities are understood and supported.

SPECIAL STAFF

Special staff officers assist the commander in professional, technical, and other functional areas. The specific number and duties of special staff officers vary at each level of command based on tables of organization and equipment (TOE) authorizations, desires of the commander, and the size and level of command.

Their functions are fully described in FM 101-5 and do not differ significantly at brigade level. Special staff officers who normally advise the brigade commander during combat operations are—

- Headquarters commandant.
- FSB commander (responsible for security, arrangement, provisioning, and movement of the main CP).
- Fire support coordinator (FSCoord).
- Brigade engineer.
- Chemical officer.
- Communications-Electronics (CE) officer.
- Air liaison officer (ALO).
- Chaplain.
- Surgeon.
- MP platoon leader.
- Army aviation LO.
- AD officer.
- IEW support officer.

The separate brigade also has additional special staff sections normally found at division level. These include—

- Civil affairs officer (S5).
- Provost marshal.
- Public affairs officer (PAO).
- Judge advocate general (JAG).

Two members of the brigade staff are unique in that they are also major subordinate commanders in the brigade. Both must command and control their own units as well as coordinate major functional areas including but not limited to their direct subordinates.

Forward Support Battalion (FSB) Commander

The FSB commander is the brigade commander's main CSS operator. He advises the brigade commander concerning supply, maintenance, field and health services, and implementation of the CSS functions

throughout the supported brigade. The FSB commander has operational control over all units and elements within the BSA for movement, security, terrain management, and synchronization of sustainment activities. He coordinates and implements plans for assigned rear operations responsibilities within the BSA. In the separate brigade, the support battalion commander usually works through the deputy brigade commander and performs those duties normally associated with the DISCOM commander in the division.

Fire Support Coordinator (FSCoord)

The commander of the DS FA battalion is the brigade FSCoord. The FSCoord is the brigade commander's primary advisor on fire support matters. Because he is both battalion commander and staff advisor, he cannot be at the brigade headquarters continuously; he is normally in the brigade TOC during planning and is part of the orders group. He provides a full time fire support section under the direction of an artillery major, the FSO.

COMMAND POST FUNCTIONAL ORGANIZATIONS

Brigade staff officers assist the brigade commander. They also assist battalion TF commanders and their staffs by anticipating problems and their solutions, providing informal staff responses when appropriate, and helping subordinate staffs to execute actions when expertise is lacking. The brigade staff is functionally organized to help plan and conduct deep, close, and rear operations. The components of each functional section within each CP are not fixed. Staff specialists are represented in more than one functional section and participate in the activities of those sections.

Current Operations Section

This section consists of those elements necessary to provide the commander with direct control over the battle. Representation is provided as required in operations, IEW, air support, fire support, A2C2 section, engineering, chemical, and other areas. The brigade S3 section is responsible for coordinating activities in both the current operations and plans sections.

Plans Section

This section maintains a current and projected view of the whole battle and continually updates proposals to

the commander for the execution of the future battles. The personnel in this section provide expertise in the areas of operations, intelligence, EW, fire support, AD, logistics support, engineer, chemical, psychological operations (PSYOPS), Army aviation liaison, Air Force liaison, and special staff as desired by the commander.

Operations Support Section

This section coordinates support of the current close and deep operations, develops and disseminates the commander's operational directives, and allocates resources to win the current battle. The S1, S4, S5, surgeon, chaplain, PAO, and MP elements are members of this section. The FSB commander works with the brigade S1 and S4 to coordinate the functions carried on in this section.

Intelligence Section

This section includes the S2, intelligence and electronic warfare support element (IEWSE), and in the separate brigade, staff weather officer (SWO). They receive, analyze, and disseminate intelligence information to the commander and all brigade elements. The S2 section coordinates activities in this section.

Fire Support Section

This section consists of personnel from the brigade artillery element collocated with the Air Force and

Navy liaison parties. The brigade FSCoord controls this section. It conducts—

- Target value analysis (TVA).
- Integrated fire planning.
- Coordination of all fire support for the brigade.
- Coordination of EW.
- Chemical fire planning jointly with the nuclear, biological, chemical (NBC) element.
- Nuclear fire planning jointly with the NBC element.
- Command, control, and communications countermeasures (C3CM).

Army Airspace Command and Control (A2C2) Section

This section conducts routine coordination, integration, and regulation of the brigade's airspace. The Army airspace command and control section includes the aviation liaison officer, AD officer, and representatives from the fire support element (FSE) and Air Force liaison elements. The brigade S3 air coordinates this section.

Section IV. COMMAND, CONTROL, AND COMMUNICATIONS COUNTERMEASURES

To win AirLand battle, the brigade draws on the C3I system to acquire information, determine actions required, and direct the activity of subordinates. Because this decision-making function is key to battlefield success, commanders have an inherent requirement to protect their C3I systems and counter those of the enemy by using C3CM. The commander and staff execute C3CM through the integrated, complementary employment of OPSEC, jamming, deception, and physical destruction.

C3CM consist of two separate but closely related functions:

- C3-Protection. C3-protection measures protect friendly C3I from enemy attack and deception.

- Counter-C3. Counter-C3 measures degrade the enemy's command and control ability.

OPSEC, jamming, deception, and physical destruction are applicable to both functions, but the commander and staff must determine how to best implement them based on the factors of mission, enemy, terrain (includes weather), troops, and time available (METT-T).

The OPSEC program for the brigade is managed by the S3. He analyzes the commander's concept of the operation to determine the essential elements of friendly information (EEFI) that must be protected from exploitation by enemy intelligence. The S3 develops appropriate OPSEC measures based on his

assessment of enemy intelligence collection capabilities and on the friendly indicators that may compromise the EEFI. These OPSEC measures are primarily procedural in nature and include —

- Signal security to protect operational information by practicing communications security (COMSEC) and electronic security techniques.
- Information security to prevent disclosure of operational information through written, verbal, or graphic communications.
- Physical security that consists of physical measures designed to protect personnel; prevent unauthorized access to equipment, facilities, materiel, and documents; and guard against espionage, sabotage, damage, or theft.

Jamming contributes to C3-protection by defending and screening friendly C3I. In the counter-C3 role, jamming is used to disrupt and deceive threat C3I. The brigade has no organic jamming assets. In most instances, EW assets are deployed as general support (GS) to the division, with detailed planning for EW operations conducted at division. When EW assets are in general support to the division, the brigade S3 requests EW support for designated targets. EW assets respond to these requests according to the priorities established by the division commander, G2, and G3. When EW assets directly support brigade, the S3 is

responsible for planning and coordinating the operations of the EW units. This includes integrating EW with fire and maneuver to ensure supporting EW resources are used effectively to support brigade and battalion operations.

The brigade's primary role in deception is to execute division and corps battlefield deception plans. Brigade units may or may not know that they are participating in a deception effort. The brigade's participation may be limited to practicing sound OPSEC measures or to employing active deceptive measures such as demonstrations, feints, ruses, or displays.

In the counter-C3 role, the commander or S3 identifies those functions that must be degraded or destroyed. These functions include enemy jammers, reconnaissance units, and regimental CP. The S2, FSCoord, and S3 decide which collection assets will be needed to locate the C3I targets and which destruction assets will be needed to destroy them. Even if the brigade has DS EW assets, the S3 may still have to request additional support from division or request that EW assets from corps and division provide information on the specified target. This information would indicate the target's location, description, and posture. The FSO coordinates directly with the brigade S2 and artillery battalion S2 for this information while planning to attack these targets with indirect fires.

Section V. INTELLIGENCE PREPARATION OF THE BATTLEFIELD

The IPB process is a staff tool that helps identify and answer the commander's PIR. IPB is initiated and coordinated by the S2 and used to predict battlefield events and synchronize courses of action. IPB is designed to reduce the commander's uncertainties concerning weather, enemy, and terrain for a specific geographic area in a graphic format. IPB enables the commander to see the battlefield: where friendly and enemy forces can move, shoot, and communicate; where critical areas lie; and where enemy forces are most vulnerable. IPB guides the S2 concerning where and when to employ collection agencies to detect specifics of enemy activities that tend collectively to fulfill intelligence requirements. IPB essentially provides a baseline of all information concerning weather, enemy, and terrain

that initially fulfills the commander's intelligence requirements for a given tactical operation. Because IPB is a dynamic analytical technique, it is constantly updated to support future military operations.

IPB is a continuous and systematic five-function process performed for a specific geographic area. The first function, battlefield area evaluation, is done first. The remaining four functions are performed simultaneously as dictated by the mission. The five IPB functions are —

- Evaluation of the battlefield (areas of operation and interest).
- Terrain analysis.

- Weather analysis.
- Threat evaluation.
- Threat integration.

EVALUATION OF THE BATTLEFIELD

The IPB process begins with the analysis of the battlefield area given the unit's contingency missions. The commander must see the entire battlefield in terms of the dimensions of depth, width, airspace (height), and time.

TERRAIN ANALYSIS

Terrain analysis of the battlefield area is then performed. Terrain is analyzed to isolate militarily significant areas, specifically avenues of approach and mobility corridors. Use observation and fields of fire, cover and concealment, obstacles, key terrain, and avenues of approach (OCOKA) to determine how those areas affect friendly and enemy capabilities, vulnerabilities, and courses of action. Maps supply terrain information, but more detail may be required.

WEATHER ANALYSIS

Weather analysis occurs simultaneously with terrain analysis. The military aspects of weather are analyzed to determine their effects on the terrain and friendly and enemy courses of action. Weather information is gathered and disseminated by the division's SWO and weather team. The result of terrain and weather analysis is terrain and weather intelligence; the S2 estimates the effects of both on friendly and enemy courses of action. Graphically, the S2 may prepare a combined obstacles overlay (COO), which specifies the locations, types, and sizes of obstacles, NBC contamination, and smoke. The S2 may modify the COO to include the locations of key terrain, avenues of approach, and mobility corridors.

THREAT EVALUATION

Threat evaluation requires the brigade staff to identify the probable enemy force. Order of battle and other relevant documents are researched to ascertain the enemy's composition, disposition, strength, tactics, training, logistics, combat effectiveness, and electronic

technical data. This research results in the development of doctrinal templates keyed to map scale that depict the enemy's most probable dispositions without the constraints of weather and terrain for a given enemy operation. Doctrinal templates can be used with a current enemy situation depicted on a SITMAP to identify intelligence gaps and to more precisely identify the probable locations of enemy high-value targets (HVT).

THREAT INTEGRATION

The last function of the IPB process integrates the analysis from the previous functions. Graphics are key to IPB. IPB requires the construction of templates, which are graphic illustrations drawn to map scale based on written documentation including intelligence estimates, analyses of the area of operations, and order of battle books. Four types of templates are constructed during the IPB process: doctrinal, situation, event, and decision support.

Doctrinal templates are combined with COOs to form situational templates. Situational templates require the analyst to rearrange doctrinal templates to take into consideration the effects of weather and terrain on enemy dispositions.

Event templating is based on events that provide indicators of enemy courses of action. Named areas of interest (NAI) are depicted on the event template. NAIs are points of areas along a mobility corridor where enemy activity or lack of activity will confirm or deny a particular enemy course of action. NAIs focus collection agencies on where to look and what to look for based on situational templates. Time phase lines (PL) may also be included on the event template indicating the extent of enemy advance or withdrawal by hours or fractions of hours.

The DST consolidates the steps in the process. The S3 briefs the commander on the DST. The DST does not dictate decisions to the commander. It outlines friendly courses of action, relative to time and location, that the commander may execute. The DST is based on a thorough examination of the enemy, weather, terrain, and own forces available. Target areas of interest (TAI), DPs, and time PLs are depicted on the DST to assist the commander in preparing for the battle. The

DST focuses on critical areas and times needed to plan for and execute friendly force employment.

TAIs are areas along each mobility corridor where the commander can influence the enemy through fire or maneuver. TAIs afford the commander the option of delaying, disrupting, destroying, or manipulating the enemy force. TAIs should be identified in all tactical operations and should include the deep and rear operations. Typical TAIs include areas surrounding bridges of unfordable rivers, tunnels, road junctions, deeply incised valleys, landing zones (LZ), and drop zones (DZ). The S2 recommends TAIs with the S3 and FSO; the commander selects and approves TAIs to be incorporated into the OPORD.

DPs are closely associated with TAIs. DPs, like TAIs and NAIs, identify battlefield events that may require tactical decisions and when those tactical decisions must be made. DPs assist the commander in making tactical decisions early enough so that the desired effect is successfully achieved. DPs equate time and distance to specific points on the battlefield. By comparing times required to implement decisions for employing maneuver forces, artillery, battlefield air interdiction (BAI) and CAS, jammers, and engineers with enemy movement rates, the S3 can synchronize the employment of combat multipliers. For example, if the enemy force is approaching a bridge over an unfordable river, there would be several DPs or a DP cluster associated with the bridge. The farthest DP might be five to six hours from the bridge; this may equate to the time required to move a battalion TF to the bridge and set up a defensive position. The next DP might be three hours away, the time required to request and execute an immediate USAF bombing attack on the bridge. As the enemy moves past a DP, one attack option may be lost because the enemy will arrive at the bridge before that option can be exercised. The remaining DPs of the cluster might be keyed to jammers, engineers, and artillery. The S2 must know friendly force reaction times to designate DPs.

Time PLs are transcribed from the event template onto the DST, again indicating the maximum extent of advance or withdrawal. Time PLs are identified by hours (such as H-hour and H+1) or fractions of hours (such as H+1.5 and H+1.75). They are drawn across each mobility corridor by modifying enemy doctrinal movement rates given terrain and weather conditions.

The creation of the DST does not conclude the IPB process. As new contingencies or missions arise, IPB is renewed. It must be emphasized again that IPB is ap-

plicable to all military operations; IPB attempts to reduce the commander's uncertainties concerning the weather, enemy, and terrain before the battle begins.

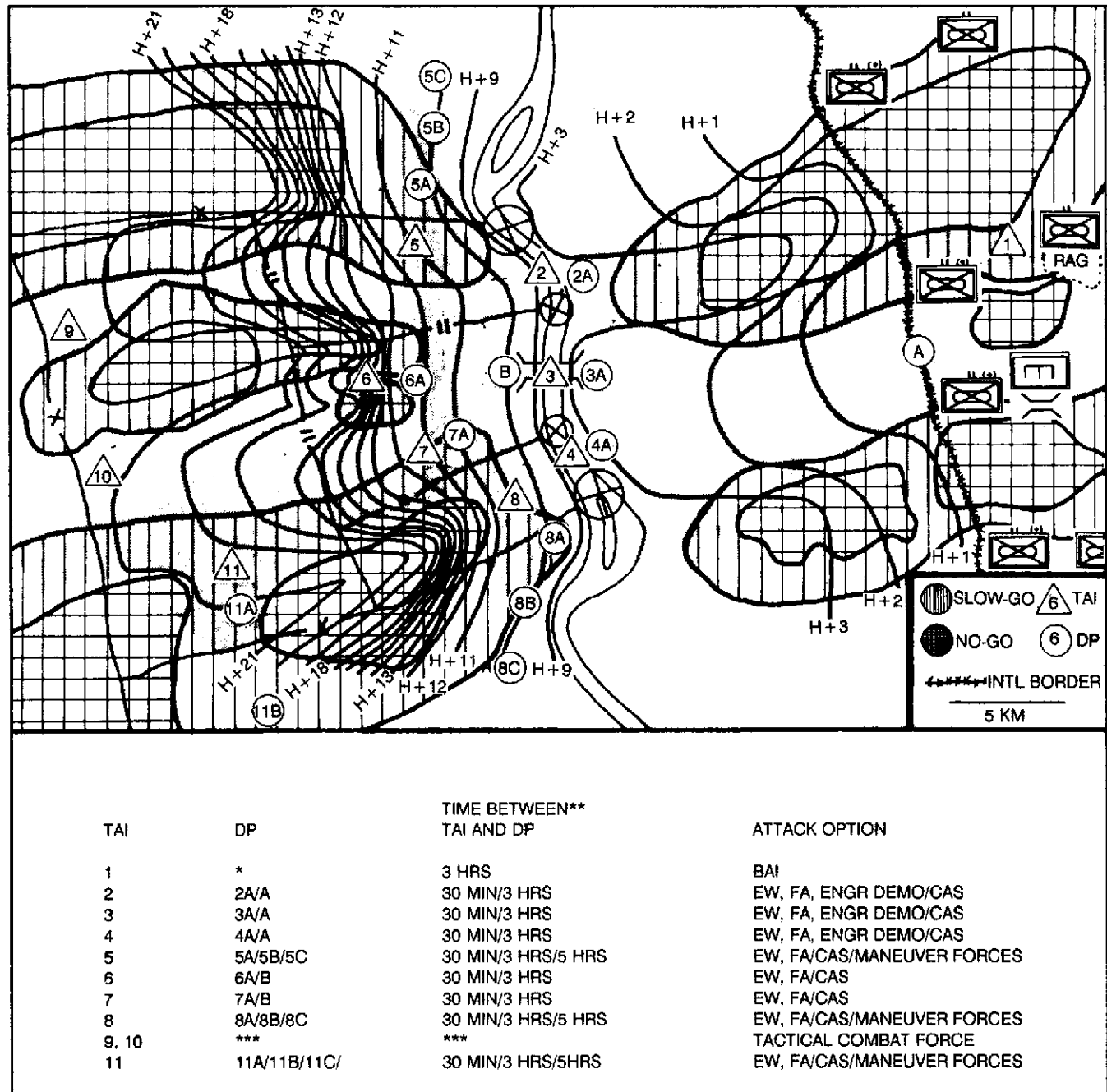


Figure 2-1. Decision Support Template.

Although IPB is an excellent technique of reducing uncertainties concerning weather, enemy, and terrain, it rarely eliminates uncertainty. Intelligence gaps resulting from the templating process form the basis for identifying intelligence collection needs. These needs are expressed as PIRs and information requirements (IR). The S2 is responsible for recommending PIRs based on the current DST.

Approved PIRs and commander-stated PIRs are processed into a collection of questions called IRs, which are sent to collection agencies of the brigade (such as subordinate battalions and MI elements) for collection action. Based on PIRs and IRs, the reconnaissance and surveillance plan is created.

Incoming information from collection missions is immediately scanned for combat information. Combat information is usually highly perishable and critical to the current combat situation. Consequently, combat information is immediately sent to the tactical commander, allowing him to take action to attack and destroy or bypass and disrupt enemy forces. The information is processed by recording, evaluating, and interpreting it into intelligence concerning enemy capabilities, vulnerabilities, and intentions.

Both combat information and intelligence must then be disseminated in a timely manner. Spot reports are best used to disseminate combat information. Intelligence can be disseminated by way of intelligence reports or intelligence summaries. The intelligence estimate is continually updated; at brigade, the intelligence estimate is likely to be in DST format.

TARGET DEVELOPMENT

Target development is designed to provide direct-targeting data to commanders for immediate fire and maneuver in close operations and to collect and correlate information from all sources to develop target data for attacking second-echelon targets in deep operations. TVA is a method used to identify HVT, elements of the enemy force that are most critical to the successful completion of enemy operation. The S2, battlefield information control center (BICC), and staff use IPB to determine the enemy's HVT based on doctrine for a given enemy operation. The predicted enemy course of action (as determined by the S2) and the HVT list are weighed by the brigade commander and the S3 to determine the friendly concept of the operation. High-payoff targets are then identified, ranked, and listed. A high-payoff target, once approved by the commander, is a target that must be acquired and successfully attacked to ensure the success of friendly operations. The approved list of high-payoff targets is then provided to the FSE, brigade EW officer, and ALO and integrated into the OPORD.

The S2's job does not end here. Before high-payoff targets can be destroyed, neutralized, or suppressed, they must be found. The S2, BICC, and IEWSE use collection agencies to find high-payoff targets so that they may be shelled, bombed, or jammed. Also, once the high-payoff target has been found and attacked, the S2 and BICC collect again to assess the damage done to the target. See FM 34-3 for more detailed information on IPB.

CHAPTER 3

OFFENSIVE OPERATIONS

Brigades normally conduct offensive missions in support of a division or corps operation. These missions include serving as the main attack, the reserve, follow and support, and supporting attack. The factors of

METT-T may require that the brigade be task organized differently for each mission. Brigade resources are almost always limited.

Section I. CHARACTERISTICS OF OFFENSIVE OPERATIONS

The offensive is the commander's primary means of gaining the initiative. Through constant offensive pressure on the enemy, he is best able to force the enemy to conform to his intent and retain his own freedom of action. Even in the defense, the commander seeks to regain the initiative through offensive action at the earliest opportunity.

The success of the attack depends on the proper application of five offensive characteristics: concentration, surprise, speed, flexibility, and audacity. Concentration is achieved by narrowing the zone of the main attack, thereby achieving an advantage of combat power at the point of the attack. Brigade commanders must balance the requirement for concentration with that of presenting a lucrative target for enemy counterattacks by

indirect conventional or nuclear fires. Concentrated combat power is also achieved by allocating and shifting priorities of fire support at the point of the attack. This may require an economy of force from elsewhere in a brigade area, using supporting attacks to fix the enemy in position and taking calculated risks.

Surprise, speed, flexibility, and audacity provide the depth and agility required for successful brigade offensive operations. Surprise is achieved by attacking at unexpected locations and times. Speed and the flexibility to rapidly shift the main effort to take advantage of enemy vulnerabilities and weaknesses contribute to the success of the brigade's attack. Brigade commanders must be audacious and capable of taking advantage of fleeting windows of opportunity.

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Section II. OFFENSIVE FRAMEWORK

The offensive framework is organized into five complementary elements:

- Deep operations. In vital parts of the attack zone, deep operations contribute to the success of the brigade's close fight. Deep operations limit the enemy's options and disrupt its coordination and synchronization. Brigade deep operations are closely linked with division operations. Identification of division deep operations assists the brigade in targeting units and setting priorities for brigade deep operations.
- Reconnaissance and security operations forward and to the flanks and rear of the main and supporting attacks.
- A main attack with supporting attacks as required. The brigade commander designates the

main effort and allocates the requisite combat and CS assets to ensure its success.

- Reserve operations. The reserve force and potential missions are clearly designated and available for commitment at a decisive moment.
- Rear operations necessary to maintain offensive momentum. This may include fighting enemy airborne and airmobile units within the BSA until augmented by combat units from brigade or division as well as the necessary activities to sustain the brigade's offensive momentum.

These five elements cannot be viewed separately. They are woven into the overall plan so that collectively they contribute to successful offensive operations.

Section III. WHY THE THREAT DEFENDS

Threat doctrine describes offense as the principle combat operation. While defense may be necessary at times, it is seen as a temporary expedient. In general, Threat commanders defend to accomplish one or a combination of the following actions:

- Consolidate gains of advance elements.
- Await additional resources.
- Protect the flanks of a formation or a sea coast.
- Repulse an enemy counterthrust.
- Regroup after suffering severe losses from nuclear weapons.
- Free resources for other formation elements that are on the offensive.

After the enemy has been located, principal tasks in the attack include —

- Determining the enemy's weak point.
- Fixing or holding the enemy in position.
- Maneuvering to gain positional advantage.
- Synchronizing and massing combat power at the decisive locations and times.
- Awaiting logistics support when lines of communication have been interdicted or out-distanced.

The Threat defense is designed to hold an occupied area, to repulse the attack by exhausting and depleting the friendly force's strength, and to make the friendly force vulnerable to counterattack. See FM 100-2-1, FM 100-2-2, and FM 100-2-3 for detailed information on Threat defensive tactics.

Section IV. PLANNING FOR OFFENSIVE OPERATIONS

Combat power in the offense is maximized by organizing responsive combined arms forces that can move rapidly, deliver accurate fire, and maintain continuous communication. Plans must provide flexibility to use any favorable advantage that develops during the at-

tack. When an opportunity for decisive action presents itself, the commander commits all necessary resources. Surprise is always sought. It can be gained by deceiving the enemy's defense and by choosing an unexpected time for, place of, direction of, and form of maneuver.

Cover and security aid in achieving surprise. Night and limited-visibility attacks with smoke also increase the probability of achieving surprise. Applying pressure day and night can deny a weakening enemy relief from battle, recoup of losses, or the opportunity to gain the initiative. Failure to take advantage of all opportunities may result in slow, inconclusive attacks and heavy losses.

Successful offensive action requires the concentration and synchronization of all assets. Available maneuver forces, engineers, FA, ADA, attack helicopter, CAS, and EW assets must be synchronized at the decisive point and time to ensure tactical success. This requires that the brigade mission be analyzed and translated into specific objectives that, when secured, permit control of the area or facilitate destruction of the enemy force. Designating main and supporting attacks and tasks to forces in the attack contributes to mission understanding and clarifies responsibilities of attacking battalions. The brigade plan will designate —

- The main attack.
- The supporting attack (committed forces).
- The reserve.
- Follow and support forces, if any.

By designating a unit to conduct the main effort, the commander identifies his main attack. The main attack is directed to secure the objectives that contribute the most mission accomplishment.

The supporting attack contributes to the success of the main attack in one or more of the following ways:

- Fixing enemy forces to facilitate the main attack.
- Controlling terrain that facilitates maneuver of the main attack.
- Destroying enemy forces that hinder the main attack.
- Deceiving the enemy as to the location of the main attack.
- Preventing or delaying enemy concentration against the main attack.

Reserves are constituted to be committed at the decisive time and place to exploit success or to ensure

mission accomplishment. They should not be used to reinforce failure in the hope of reversing a defeat.

A reserve provides the commander with the flexibility to deal with unforeseen contingencies. It also adds to security, although this is not its primary function. Reserves may consist of maneuver and CS units and chemical or nuclear munitions (or a combination of these means) once release has been granted. The reserve is specifically used to —

- Exploit success by moving to attack an enemy weakness or vulnerability or by using friendly nuclear or chemical weapons.
- Reinforce or maintain momentum by passing through or around units held up by enemy forces.
- Defeat enemy counterattacks.

The size of the reserve is determined by METT-T. In general, the vaguer the situation, the larger the reserve. Whenever possible, one-third or more of the available combat power is retained in reserve.

The reserve is positioned to —

- Permit rapid movement to points of probable employment.
- Weight the main attack by destroying or blocking enemy counters to the main attack.
- Provide security to unoccupied terrain within the brigade sector.
- Provide maximum protection from hostile observation and fire consistent with mission requirements.

Reserve missions should be sufficiently detailed to provide the reserve force commander a clear understanding of the brigade commander's intent and commitment criteria. Plans are made to reconstitute a reserve at the earliest opportunity after the original reserve is committed. Designating on-order reserve missions to committed units is a recommended technique.

Follow and support forces generally reinforce and support the main effort. Follow and support forces must be able to keep up with the attacking echelon and maintain close liaison and coordination. They are committed units that require their normal slice of CS and CSS assets.

Section V. SYNCHRONIZATION OF OFFENSIVE OPERATIONS

Successful offensive operations require the total coordination, integration, and synchronization of all

combat, CS, and CSS elements within the brigade area of operations. Synchronization of the operating systems

occurs vertically from corps and division through brigade to battalion and separate company. It also occurs horizontally among the staff sections. Major considerations for integration of the operating systems in offensive operations follow.

INTELLIGENCE

The brigade commander's guidance to the S2 should contain the commander's PIR. After coordinating with the S3, additional intelligence requirements may be recommended to the commander during the S2 and staff's IPB.

It is especially critical that an up-to-date enemy data base be prepared during the IPB process by the brigade S2 to support offensive operations and to answer the commander's PIR. The threat estimate and data base are used in identifying specific enemy vulnerabilities and weaknesses. This information assists the brigade commander in properly concentrating his available combat power.

The development of PIR and IPB is a continual process throughout the planning and execution of the offensive operation. The brigade intelligence section answers PIRs using a detailed reconnaissance and surveillance plan developed and coordinated by the brigade and TF S2s and S3s. The brigade S2 requests additional information and collection assets from division when the brigade commander's PIR cannot be met by organic brigade assets.

During the operation, the brigade S2 provides the commander continuous updates of enemy activities and anticipated enemy courses of action. His sources include reports from MI assets, eavesdropping of battalion operations and intelligence nets, analysis of reported sightings, and situational templates of the enemy.

AVIATION

Elements from the divisional aviation brigade may be placed under the OPCON of the brigade commander to accomplish a mission or for the duration of an operation pursuant to the division commander's concept of the operation. Cavalry elements conduct reconnaissance and security operations. Assault elements conduct air assault operations and provide limited CSS functions. Command aviation elements provide aerial platforms for command and control. Attack battalions augment the brigade's fire support and maneuver capability and are most effective when massed against exposed, moving armored targets.

Aviation units under the OPCON of the brigade must be completely integrated into the brigade scheme of maneuver. The IPB process identifies specific potential targets for aviation. The maneuver commander then gives specific tactical missions to his aviation assets.

Aviation units operating with the brigade or in the brigade area of operations coordinate locations for assembly areas (AA), forward AAs, and forward arming and refueling points (FARP) through the depth of the zone with the brigade S3. In offensive operations, these areas will be used in sequence as the main body advances.

Aviation units placed OPCON to the brigade remain the responsibility of the aviation brigade for logistics support. Efficient distribution of certain critical classes of supply may require coordination with the brigade's FSB.

FIRE SUPPORT

Fire support can deliver a variety of munitions to support deep, close, and rear operations. Fire support assets available to the brigade are normally one DS FA battalion and organic battalion mortars. Additional fire support assets may include —

- CAS.
- Naval gunfire (NGF).
- Army Aviation.
- Reinforcing, general support, and general support reinforcing FA battalions. Commanders normally allocate more reinforcing and general support reinforcing battalions to augment the fires of the DS FA battalion to the offense than to the defense.

The brigade FSE is the focal point for integration of all fire support for the brigade. The brigade FSCoord is the DS FA battalion commander. To effectively integrate fire support into the operation, the FSCoord must understand the mission, the commander's intent, and the concept of the operation. The FSCoord must be involved in the planning process from the outset. Using the products of the IPB and TVA processes, the FSCoord jointly war-games courses of action with the brigade commander and his staff. Following the commander's decision, the FSCoord produces the fire support plans or execution matrix, an attack guidance matrix, and the high-payoff target list. These tools fully integrate fire support for the operation by focusing attack and acquisition systems on enemy systems that must be eliminated. The FSCoord ensures fire support assets are properly employed and synchronized.

Specific considerations for the employment of fire support in offensive operations include —

- Employing weapon and target acquisition systems well forward to provide continuous in-depth support without untimely moves.
- Weighting the main attack by assigning priorities of fire support to lead elements.
- Isolating the point of attack.
- Softening enemy defenses by delivering effective preparatory fires.
- Suppressing enemy weapon systems to reduce the enemy stand-off capability.
- Screening maneuver forces adjacent to enemy units.
- Suppressing bypassed enemy elements to limit their ability to disrupt friendly operations.
- Interdicting enemy counterattack forces, isolating the defending force, and preventing its reinforcement and resupply.
- Providing counterfire to reduce the enemy's ability to disrupt friendly operations and to limit the enemy's ability to rapidly shift combat power on the battlefield.
- Supporting rear operations.

AIR DEFENSE

The division commander's ADA priorities determine what ADA resources the brigade will receive. Normally, the brigade receives a battery of ADA attached, OPCON, or DS.

The air defense officer must understand the commander's mission, intent, and concept of the operations. Continued involvement by the ADA officer in the planning process is critical to the successful integration of ADA support with the brigade concept. Even when the supporting ADA unit is DS or OPCON to the brigade, it is necessary for the ADA battery to obtain some support from the FSB, particularly Classes I, III, IV, V, and common item IX supplies. The brigade S3 also needs to consider terrain requirements to optimize ADA weapon systems and forward area alerting radars (FAAR) coverage.

Considerations for employing ADA in the offense follow:

- Mix gun and missile systems (when possible).
- Concentrate ADA to achieve massive fires at decisive points.
- Integrate ADA weapon systems throughout the brigade.
- Weight the main effort with ADA protection.
- Identify potential choke points and plan their protection.
- The supporting ADA unit must enjoy the same mobility as the supported force.

Mobile systems and man-portable air defense systems (MANPADS) are used to protect the maneuver force in the forward area. If MANPADS are used in the forward area, provisions for armor protection, C2, and early warning must be made.

The ADA battery should be task organized to support the operation from the line of departure (LD) to the objective. In the offense, the following are normal AD priorities:

- Maneuver forces.
- Choke points.
- C3I assets.
- CSS assets.

The entire combined arms team has a role in the counterair operations. All units practice air defense early warning and passive air defense measures. Also, tanks, crew-served weapons, indirect fires, IEW systems, and attack helicopters provide added all-around protection to the force and complicate the enemy air attack mission. During offensive operations beyond the range of FAAR coverage and voice communications, special provisions for early warning throughout the brigade must be planned, coordinated, and implemented. In all instances, reconnaissance and security elements of the maneuver force also provide early warning to the friendly force.

MOBILITY/COUNTERMOBILITY

The brigade engineer plans and coordinates mobility, countermobility, and survivability tasks to support the offense mission. He links engineer planning at division level and execution at battalion TF level.

Augmentation by elements of the corps engineer brigade can be expected. These additional assets can bring engineer strength supporting the brigade to battalion-size or greater. Lead TFs are normally task

organized with at least one company of combat engineers to provide adequate support in the offense, particularly to mobility operations.

In offensive operations, priority of engineer support is to mobility missions. This requires task organizing maneuver and engineer assets to breach obstacles, maintain forward momentum, and ensure routes are open to facilitate logistics support.

Countermobility planning in the offense includes the coordination of family of scatterable mines (FASCAM) delivery assets by the brigade engineer to close potential flank avenues of approach, fix enemy counterattack forces, and close retreat routes for engaged enemy units. Upon consolidation of the objective, obstacles are emplaced to support the defense against enemy counterattacks.

Survivability missions are of lower priority during offensive maneuvers; they become important upon consolidation of the objective and must be anticipated.

The brigade engineer must receive clear guidance and priorities for engineer effort. He is an integral part of the development of the scheme of maneuver; he must coordinate with the S3, FSO, ADA officer, S2, and S4 to plan engineer support.

NBC DEFENSE

Division assets available to support brigade offensive operations include NBC decontamination, NBC reconnaissance, and smoke. These assets will normally be platoon-size organizations. Based on the factors of METT-T, these organizations may be OPCON, attached, DS, or GS to the brigade.

Decontamination

Brigade decontamination operations during the offense focus on basic skills and hasty decontamination operations. Deliberate decontamination operations are designed for reconstitution operations. Hasty decontamination operations are conducted at the battalion level using organic lightweight decontamination equipment. To facilitate decontamination operations, the brigade decontaminates—

- As soon as possible.
- Only when necessary.
- As far forward as possible.
- By priority.

The brigade commander identifies mission-critical assets and establishes priorities for decontamination within the brigade. Logistics support for decontamination is coordinated by the S4 and provided through normal supply channels.

NBC Reconnaissance

All brigade units have an implied mission to conduct NBC reconnaissance using organic detection and identification equipment. The brigade S3 establishes the NBC reconnaissance requirements and tasks based on the brigade chemical officer's recommendations. The detection, marking, identification, and reporting of contaminated areas is established in SOPs according to relevant Standardization Agreements (STANAG).

Smoke

The brigade conducts smoke operations in the offense to screen friendly forces and obscure or deceive enemy forces. Normally, smoke is employed with at least one deceptive screen for every primary smoke screen. Assets that are available to provide smoke include vehicle engine exhaust smoke system (VEESS), smoke pots, artillery and mortar smoke, and generated smoke. To conduct a successful smoke mission, the brigade must provide the following information to the supporting smoke unit:

- Commander's intent.
- Location of target.
- Length of mission.
- Start time.
- Visibility requirements.

Chemical Weapons (CW) Retaliation

The brigade must plan and be prepared for the friendly use of CW. CW can be used to—

- Cause casualties.
- Degrade performance.
- Slow maneuver.
- Restrict terrain.
- Disrupt support.

The brigade identifies and nominates chemical targets to the division for execution in the retaliation. After release by the National Command Authority (NCA), authority for execution remains at division level.

CSS OPERATIONS IN THE OFFENSE

CSS operations in the offense are designed to maintain the momentum of the attack. The FSB commander prepares and executes a logistics plan developed to support the maneuver brigade's tactical plan.

The specific logistics needs of the maneuver brigade are identified and coordinated by the brigade S4. Based on the brigade S4's planning estimate, the FSB commander and his staff tailor a mobile CSS package to be pushed forward to support the brigade. Specific coordination for locations of ammunition transfer points (ATP), unit maintenance collection points (UMCP), and MSR outside of the BSA are coordinated between the FSB S3 and brigade S4, at the rear CP and approved by the brigade S3. This coordination ensures the integration of the CSS plan and the tactical plan.

FSB logistics support must be continuous. The FSB displaces priority resupply classes by bounds to support the momentum of the offense. The movement of the FSB is coordinated among the FSB, rear CP, and main CP to ensure continuous support to and to avoid impeding maneuver elements.

COMMAND AND CONTROL OF OFFENSIVE OPERATIONS

The command group, augmented by other special staff as desired by the commander, is positioned to see and sense the battle. By being well forward, the commander can feel the tempo of the battle, improve communications, and influence the main effort with his presence. The command group moves much of the time and relies on the brigade TOC to maintain communications with higher and flanking units.

The TAC CP and the main CP are required to move frequently during offensive operations. The TAC CP has to perform the C3I function for the main CP during these relocations. Therefore, the TAC CP may be augmented with more people from the current operations, intelligence, operations support, and fire support sections out of the main CP. The signal section will leapfrog multichannel and FM retransmission systems forward to maintain communications.

The main CP will continue to perform its essential current battle coordination; however, the main CP will weight its effort toward future battle planning. This is possible because the disruption of frequent displacement has caused much of the C3I structuring for working the current battle to be pushed forward to the TAC CP and command group.

The rear CP and FSB commander are heavily committed to coordinating and facilitating the pushing of CSS forward through the cluttered battlefield to sustain the attack. The rear CP and FSB commander are initially concerned with sustaining forward units; providing rear area security; clearing main supply routes (MSR); evacuating casualties, equipment, and enemy prisoners of war (EPW); and preparing to reestablish CSS base areas forward.

MILITARY POLICE

A maneuver brigade routinely receives MP in direct support. MP units may be attached when distance, logistics, or mission makes this relationship more advantageous.

MPs are capable of performing the following missions:

- Battlefield circulation control (BCC).
- EPW operations.
- Law enforcement operations.
- Area security.

Limited MP assets preclude accomplishment of all missions simultaneously. The priority of MP support in an offensive operation normally is BCC, followed by area security, EPW operations, and law enforcement.

The brigade S3 normally coordinates the assignment of missions to the MP support unit based on command priorities. The MPs coordinate EPW operations with the brigade S1. If a significant number of EPW are captured, the MPs may need augmentation to provide adequate security.

MP capabilities should not be fragmented or degraded by assigning MPs to isolated security or guard requirements such as brigade TOC security. See FM 19-4 for a more detailed explanation of the four primary MP missions.

COMMUNICATIONS

Once the brigade mission has been developed, the brigade signal officer plans, organizes, and positions the communication assets for continuous command and control of brigade offensive operations. To do this, the brigade signal officer selects secure sites for the FM retransmission to extend the capabilities of the brigade FM C2 net. The brigade signal officer also coordinates with the signal battalion S3 to ensure continuity of

OPERATIONS	REAR	CLOSE	DEEP
Intelligence	PIR: Identify threat withdrawal routes OO jams to support SEAD PIR: Locate threat defensive positions PIR: Locate obstacles GSRs attached to fwd TFs S2 continues IPB process Intelligence information passed vertically and horizontally MI company team, operating within bde area of opns, supports div MI bn/G2 at div		
Maneuver (example) Task force 1-5	Penetrates LD/LC	Attacks obj ALPHA	Consolidates/ Defends on obj ALPHA
Task force 1-2	Penetrates LD/LC as lead TF	OO prepares to conduct passage with TF 1-3	
Task force 1-4	Penetrates LD/LC as lead TF	Attacks obj BRAVO	Consolidates/ Defends on obj BRAVO
Task force 1-3	Trails TF 1-2	OO conducts passage with TF 1-2, attacks obj CHARLIE	Consolidates/ Defends on obj CHARLIE
Aviation	Recon and security Aerial platforms command and control OO attacks 2d echelon EA DRAG		
Fire support	Fires planned to support rear opns	Priority to main effort then, in order, TF 1-5, TF 1-4	Suppressive fires and deep fires to support helicopter attack on EA DRAG OO smoke to support breaching opns SEAD to support ATKHB attack EA DRAG

Figure 3-1. Brigade OI

operations of the division multichannel and radio teletypewriter (RATT) communication systems supporting the brigade. The brigade signal officer also ensures that the signal elements are capable of rapid

displacement while maintaining constant communications support.

See Figure 3-1 for an example of what offensive synchronization looks like at the brigade level.

OPERATIONS	REAR	CLOSE	DEEP
Air defense	Priority weighted to main effort Assets integrated throughout lead TF Weapons control status: Tight		
Mobility/ Countermobility	Priority to mobility; Breaching assets fwd Support MSRs to objs Hasty vehicle fighting positions upon seizing objs;		
Nuclear, biological, chemical	Smoke LD/LC; Priority to main	Mobile emplaced smoke to support movement to objs; OO artillery smoke on objs Hasty decon at objs NBC recon platoon fwd, with lead TF	
Combat support and combat service support	Classes III, IV V, and VIII stocked fwd	Ambulance evac teams with TF combat trains FSB support teams fwd: Priority to main effort Priority of MP support to battlefield circulation control, and then flank security to support resupply fwd, then EPW opns	
Command and control	TAC CP with main effort: Jumps as required Bde main along southern axis	OO jumps upon seizure of obj BRAVO	TOC synchronizes deep attack into EA DRAG

Figure 3-1. Brigade OI

Figure 3-1. Brigade OI

Figure 3-1. Brigade OI

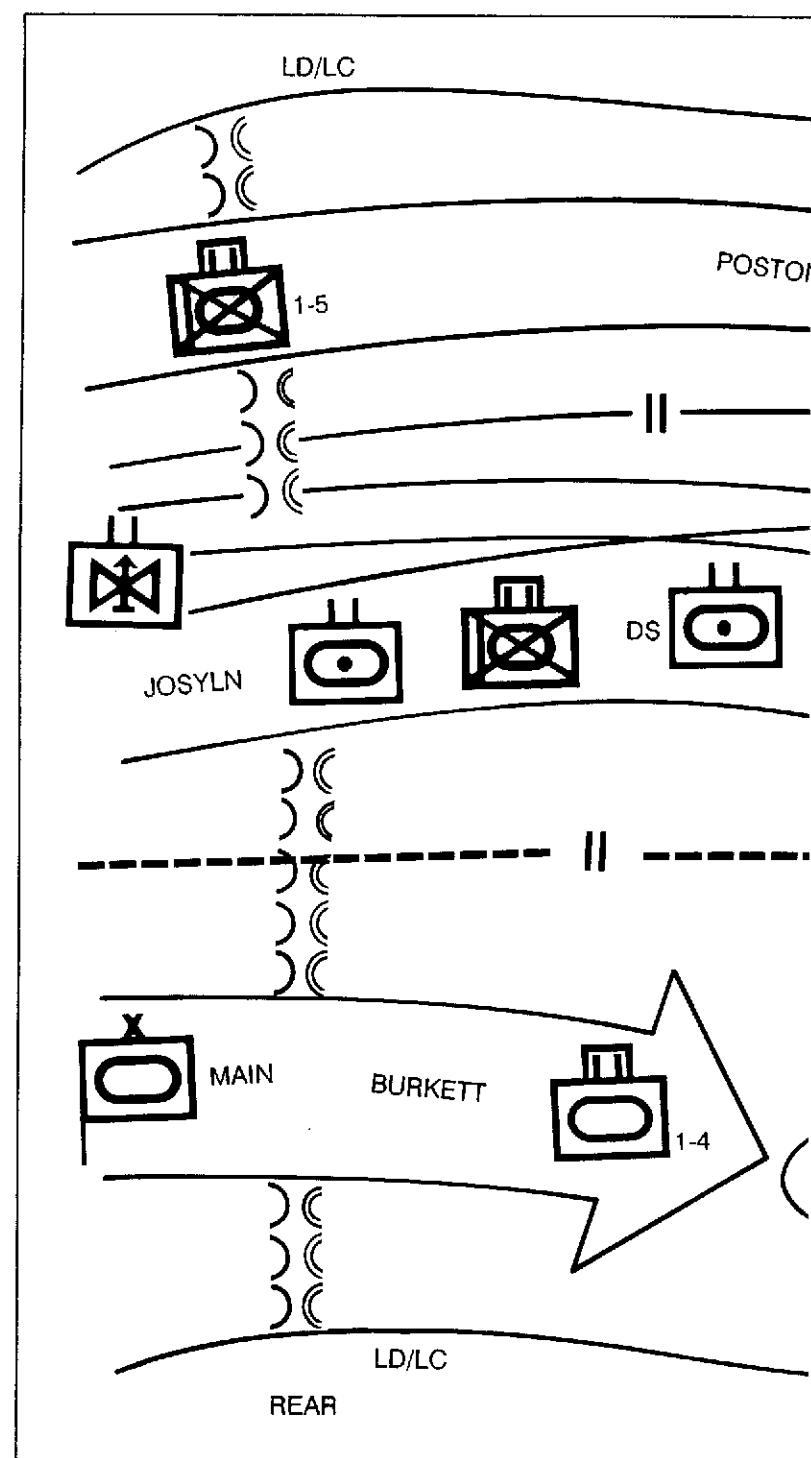
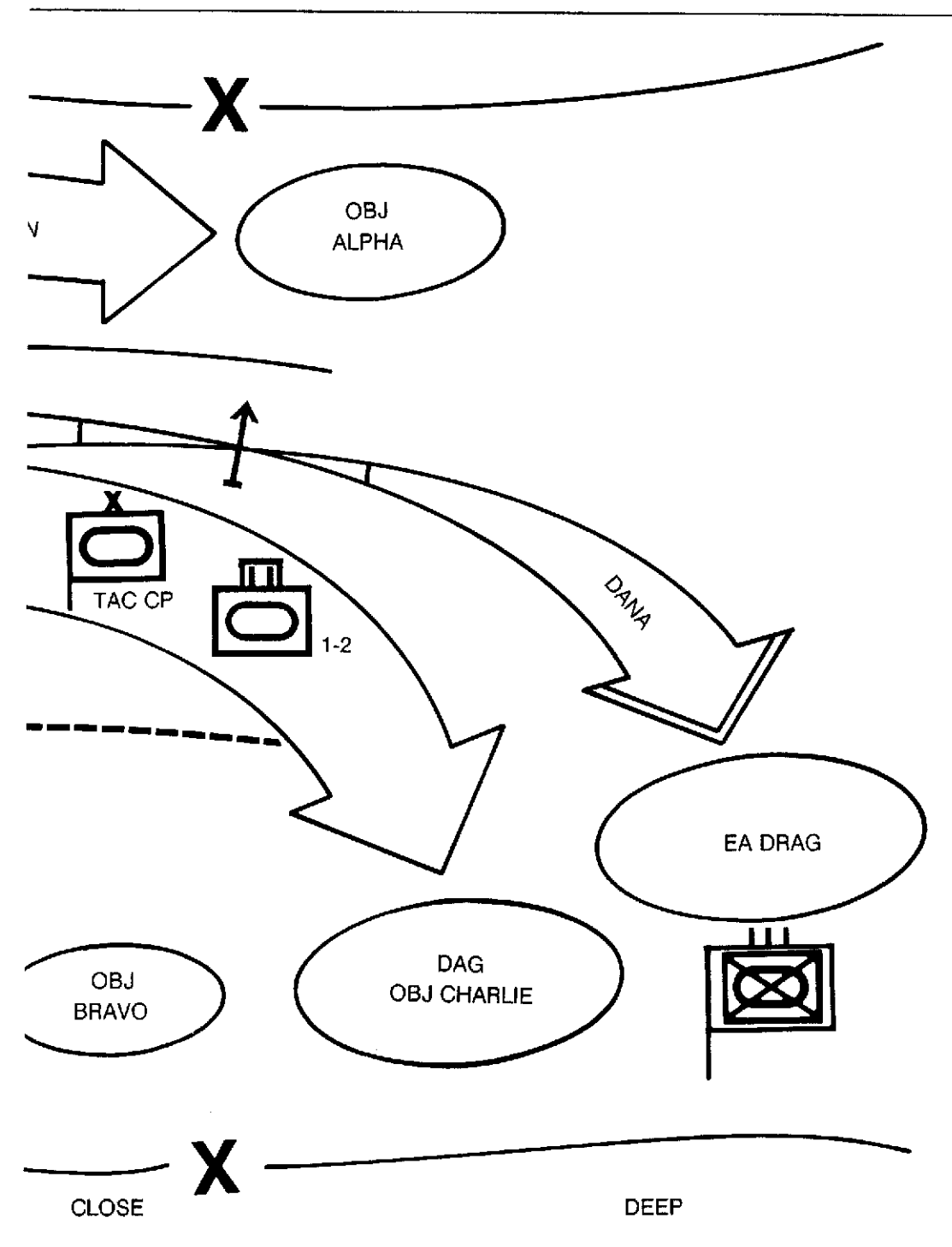


Figure 3-1. Brig



ade Offensive Synchronization (Continued).

Section VI. FORMS OF MANEUVER

The five basic forms of maneuver are envelopment, turning movement, infiltration, penetration, and frontal attack. The brigade can conduct a frontal attack, penetration, and envelopment. The brigade can participate as one element of a turning movement conducted by corps. Subordinate infantry units can conduct an infiltration as part of the brigade's larger mission.

ENVELOPMENT

Envelopment is the basic form of maneuver that seeks to apply strength against weakness. Envelopment avoids the enemy's front where forces are most protected, attention is focused, and fires are most easily concentrated. The attacker fixes the defender with supporting attacks. The attacker maneuvers the main attack around or over the enemy's defenses to strike at its flanks and rear. Detailed IPB and reconnaissance of the enemy defensive position are required for successful envelopments. If there is no open flank or gaps leading to

a flank, gaps can be created by movement, or by deception operations. If granted, nuclear weapons are particularly useful for creating gaps.

Successful envelopment often depends on preventing the enemy from reacting with enough force to slow the attack. Battalions usually require fixing the enemy with supporting attacks. Remaining battalions move past the enemy flank to rear positions, then forced to fight in several different positions.

Envelopment is the preferred form of maneuver. Striking from several directions at unexpected directions forces the enemy to fight along defended avenues of approach (see Figure 3-2). The envelopment are variations of the en-

velopments, fire and movement. If release has been particularly useful for

depends on speed to maneuver quickly and with the brigade envelopments with a battalion supporting then maneuver positions. The enemy is reactions or abandon

form of maneuver. It once or from unexpected directions forces the enemy to fight along defended avenues of approach. Double and aerial envelopment.

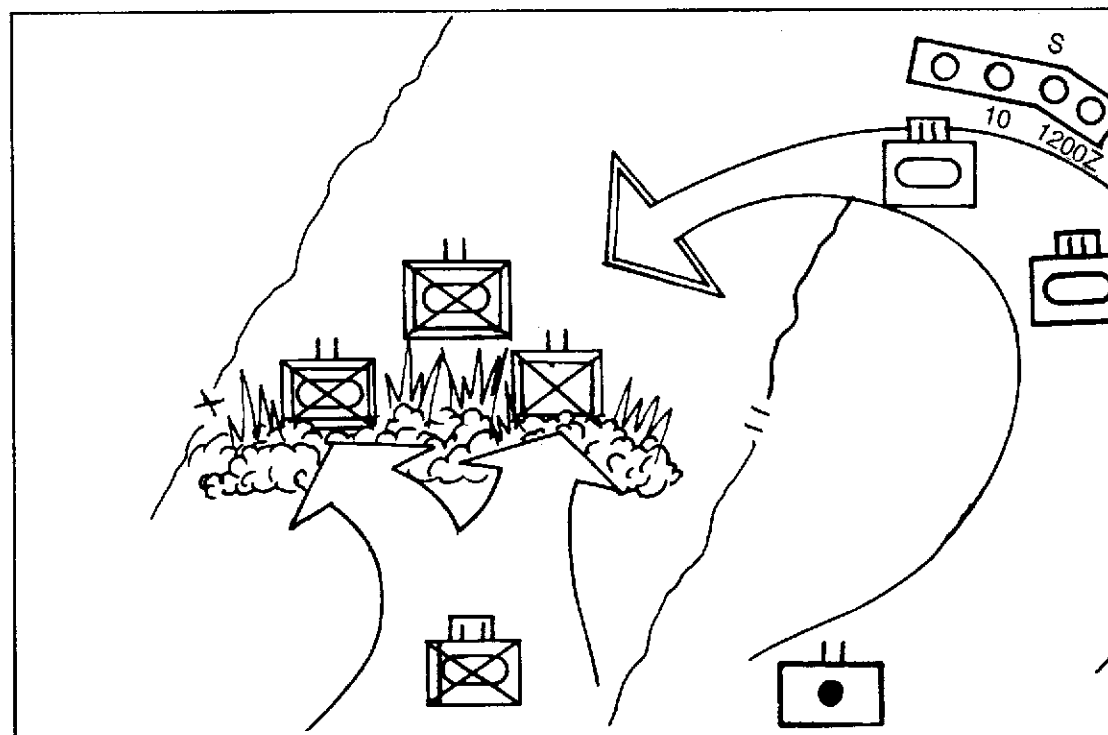


Figure 3-2. Envelopment.

TURNING MOVEMENT

A turning movement is a large scale envelopment in which the attacking force passes over and around the enemy defense to secure objectives deep in the enemy's rear. Brigades participate in turning movements as part of a larger force.

INFILTRATION

Infiltration is the covert movement (mounted or dismounted) of all or part of the attacking force through enemy lines to a favorable position in the enemy's rear. A heavy brigade cannot expect to infiltrate all its combat elements through the enemy's defense. The brigade attacks after infiltration or uses infiltration to obtain intelligence and to harass the enemy. Though it is not restricted to small units or dismounted infantry, the brigade normally employs infiltration techniques with a part of its units in conjunction with offensive operations by the remainder. Dismounted infiltration is particularly effective when both opposing forces are mechanized and unaccustomed to defending against dismounted troops. In these instances, infantry with supporting engineers infiltrate, followed quickly by mounted attacks. Fire support assists infiltration by supporting the deception plan. The commander centralizes control of fire support to preclude the loss of surprise and fratricide as the infiltration is conducted.

PENETRATION

The penetration attempts to rupture enemy defenses on a narrow front and create both assailable flanks and access to the enemy's rear. Penetration is used when enemy flanks are not assailable, when enemy defense is overextended, or when time does not permit some other form of maneuver. Penetrations typically comprise three stages: initial rupture of enemy positions, roll-up of the flanks on either side of the gap, and exploitation to secure deep objectives.

A successful penetration depends on the ability of the attacker to suppress enemy weapons, mass forces and fires to overwhelm the defender at the point of attack, and quickly pass sufficient forces through the gap to rupture the defense. Once this is accomplished, the commander has two options. He can continue forward to rupture successive defense lines and ultimately enter enemy rear areas, or he can turn forces to roll-up enemy positions from the flanks. Nuclear weapons may be used (if release has been granted) to rupture the enemy defense.

A successful penetration requires concentration of maneuver forces on a narrow front, synchronized fire support, and attack helicopters (where available). There are several ways to conduct a penetration of the enemy's defense, depending on the forces the brigade has available. When attack helicopters and CAS are available, the brigade may use them with deep fires to defeat counterattack forces or defensive positions in depth while field artillery and mortar concentrations are

suppressing direct- and indirect-fire weapons at the penetration point.

Two or more battalions make the main effort to create and widen a gap in the enemy's defense and hold the penetration open while an additional battalion is held ready to pass through the gap into the enemy's rear. This type of attack is normally required when attacking strong, well-prepared enemy defenses.

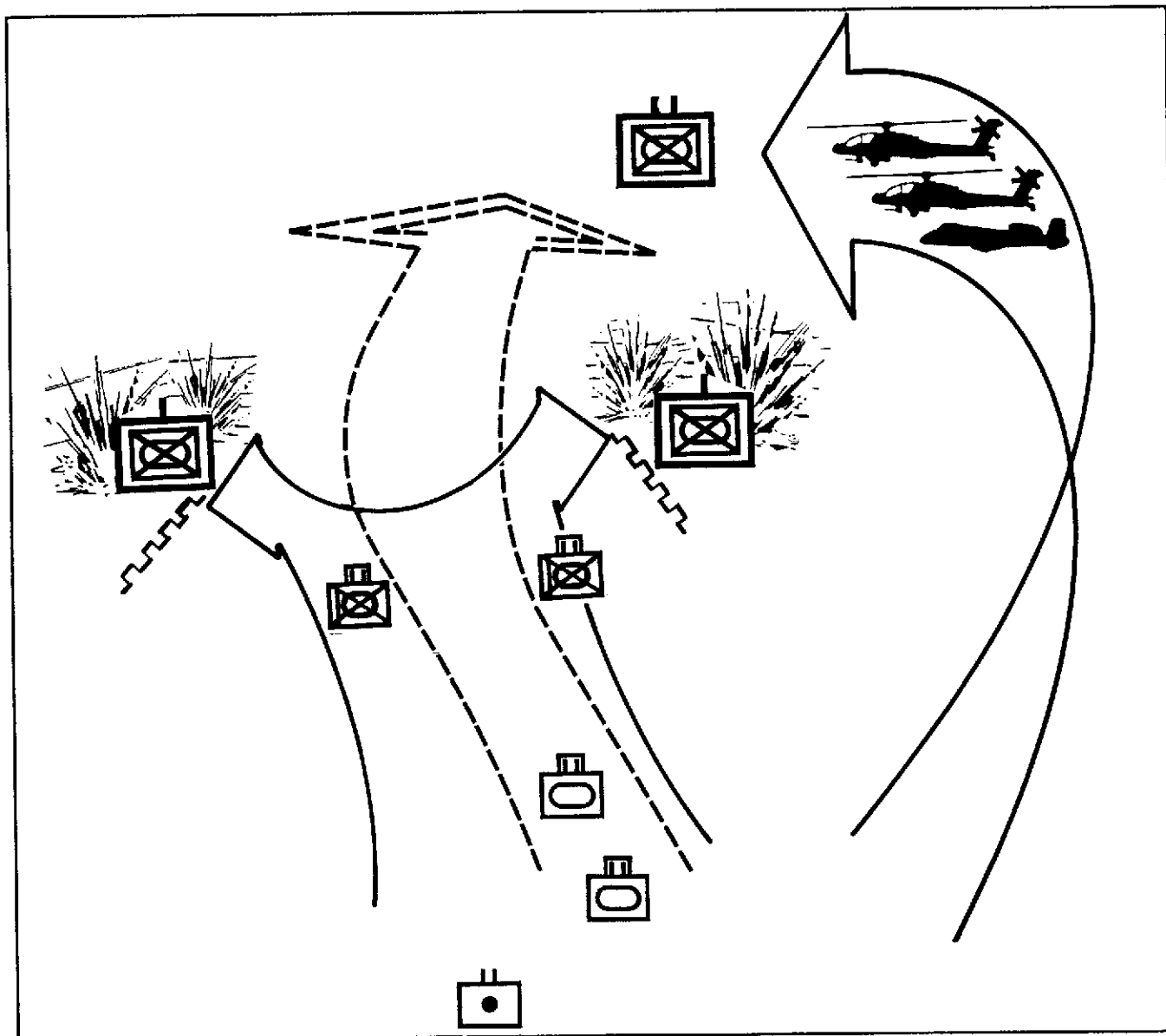


Figure 3-3. Penetration Against a Well-Prepared Defense.

Two or more battalions make the main effort to push through enemy defenses into the enemy's rear while an additional battalion fixes enemy forces in position. A small reserve may be set up if there are sufficient forces. This type of operation is normally conducted against enemy defenses that extend over a wide area.

One battalion makes the main attack while remaining battalions are held ready to pass through. Under these circumstances, it may be necessary to fix enemy forces elsewhere by indirect fire or by deception. This type of operation may be conducted when attacking a flank, when the enemy is weak and its forward defenses can be easily penetrated, or when there is only one weak point identified due to enemy defenses or terrain.

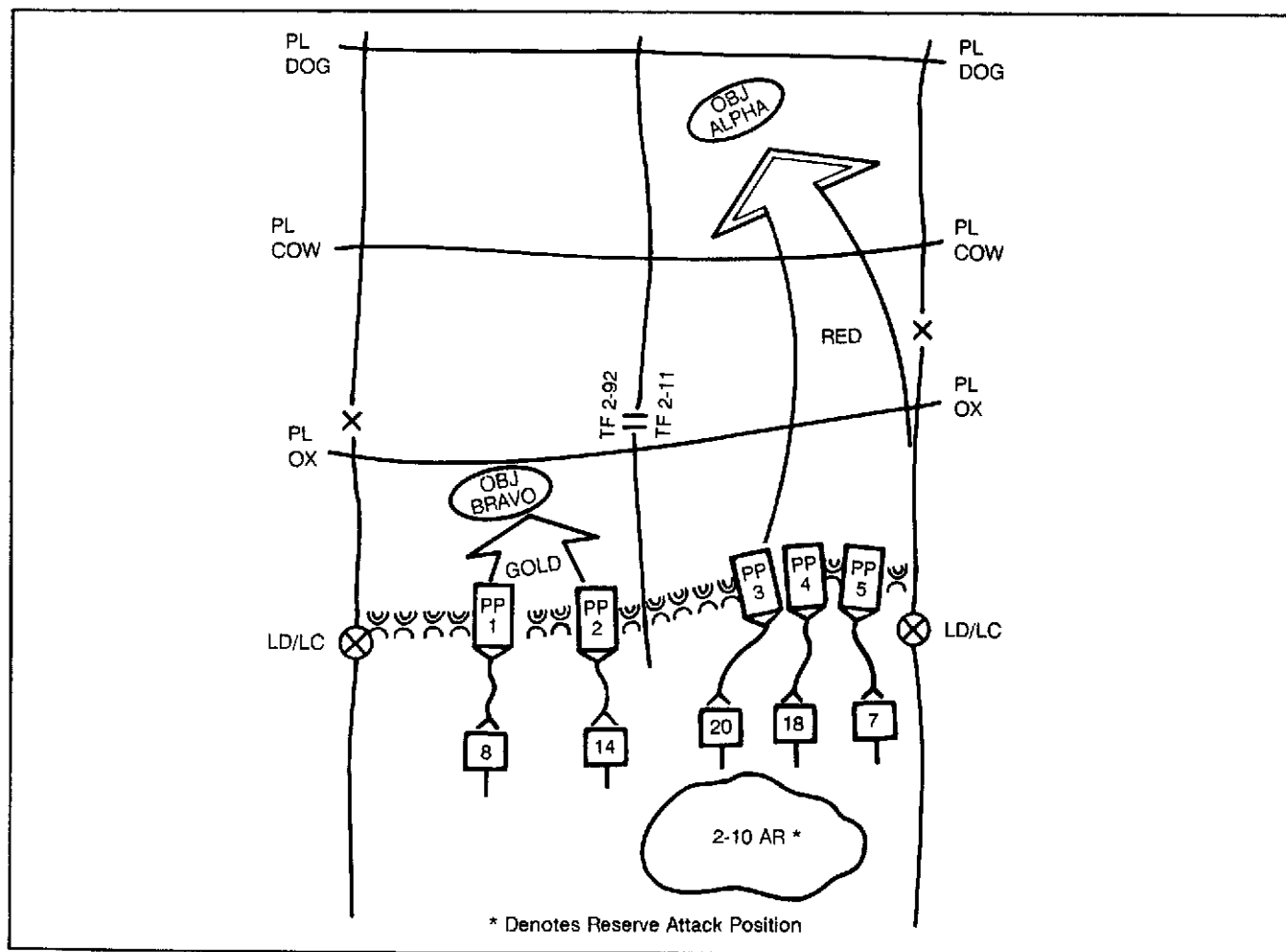


Figure 3-4. Penetration Using Main and Supporting Attacks.

FRONTAL ATTACK

The frontal attack is the least desirable form of maneuver. A frontal attack is used to strike the enemy across a wide front and over the most direct approaches. The purpose of the frontal attack is to overrun and destroy or capture a weakened enemy in position or to fix an enemy force in place to support another friendly attack elsewhere. Although the frontal attack strikes along the entire front within the zone of the attacking force, it does not require that all combat forces be employed in line or that all combat forces conduct a frontal attack. During a frontal attack, the commander seeks to create or take advantage of conditions that permit a penetration or envelopment of the enemy position. Fires are delivered across the zone of the attacking force, then shifted to the points of penetration or envelopment to facilitate rapid movement through enemy positions.

Section VII. BRIGADE FORMATIONS FOR OFFENSIVE ACTIONS

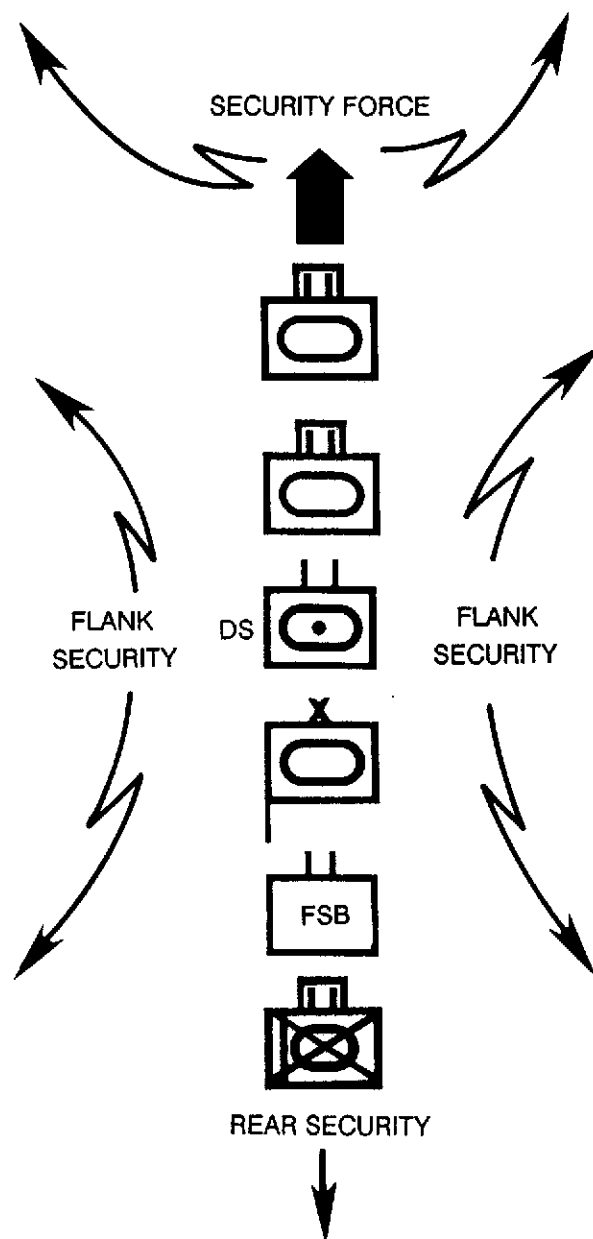
The brigade may use any of several basic formations in offensive operations. It may attack with battalion TFs in column, in line, with or without reserves, or in variations thereof. The scheme of maneuver identifies the initial attack formation that offers the best chance for success. These formations are not restrictive drills but general techniques for employment of subordinate battalion TFs. After commitment to battle, the brigade can rapidly alter its formation and organization for combat to conform to the changing situation. The brigade's scheme of maneuver should ensure superior combat power at the point of decision.

BRIGADE IN COLUMN

A column of battalion TFs may be adopted for the initial attack when terrain or enemy defenses force the brigade to attack on a narrow front or at night. In certain situations, the strength, composition, and location of enemy reserves may require the brigade to adopt this formation to provide the depth necessary for sustained attack. This formation facilitates retention of the initiative and permits flexibility because the following

battalion TFs are in position to move through or around the leading elements to maintain the momentum of the attack. It also provides a degree of security because the following battalions are in position to counter a threat from either flank and support the uninterrupted advance of the leading troops. Leading companies react freely to developments at their immediate front; however, brigades in column can concentrate only a small part of their combat power to the front initially and are subject to piecemeal commitment and slower deployment to the front.

Brigades in column are vulnerable to air attacks and counterfire. Air defense assets must be interspersed throughout the column. All weapons, including tank and Bradley fighting vehicle (BFV) main-gun armaments, are part of the air defense protection and participate in protecting the force. Field artillery is positioned to provide counterfire during this movement. Brigades require multiple routes in their zones if they are to attack effectively from columns. Passage of the brigade through a given area using this formation usually requires more time than when other formations are used.



Note. Size, composition, and distance of operation from main body for advance, flank, and rear security will vary according to the commander's estimate of the situation.

Figure 3-5. Brigade in Column.

BRIGADE VEE

When two or more battalion TFs of the brigade are on line, any remaining battalion TFs may be designated as the brigade reserve. The reserve can exploit success, assume the mission of a leading TF, or counter enemy threats to the brigade mission.

The brigade vee may be employed when great depth in the attack is not required, such as in a limited-objective attack. It may also be used in the initial attack against a weak enemy, vulnerable to defeat by an attack on a relatively wide front. In the envelopment, this formation can be used when the brigade can envelop an assailable flank on a broad front. The lead TFs receive the priority of fire support.

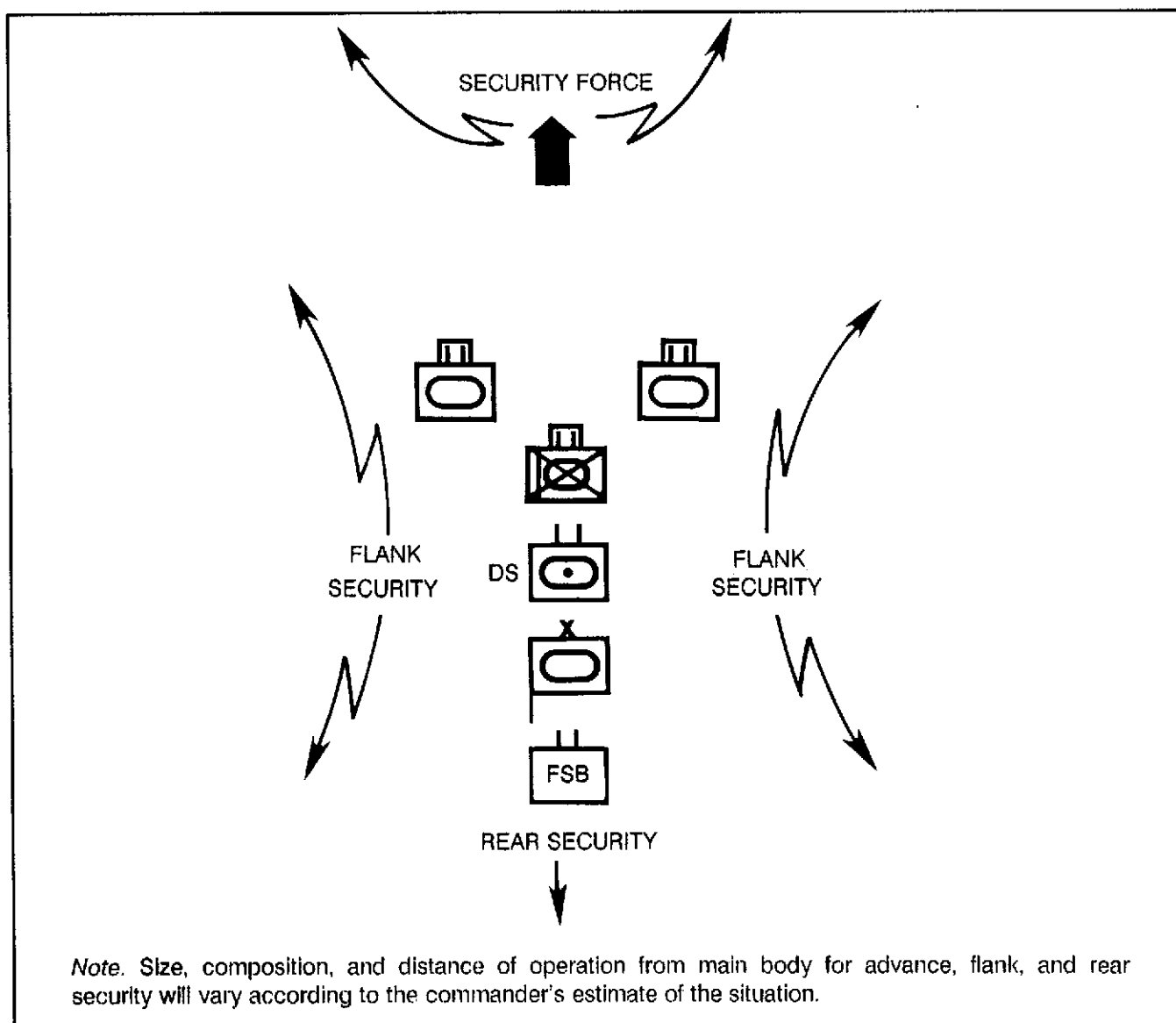


Figure 3-6. Brigade Vee.

BRIGADE ON LINE WITHOUT A RESERVE

Normally, the brigade commander retains some degree of flexibility in his initial attack by withholding part of his force in reserve; however, where METT-T warrants, a formation with two or more TFs abreast without a reserve may be used successfully. Inherently dangerous, it is considered when the enemy has been routed and is incapable of a large-scale counterattack.

This might occur during a corps or division exploitation or pursuit; however, terrain must allow this formation, and the enemy situation must not initially necessitate a reserve. Fire support is usually positioned well forward to provide maximum continuous fires as the brigade attacks. The fundamental consideration in the use of this formation is whether the mission dictates a rapid advance on a broad front.

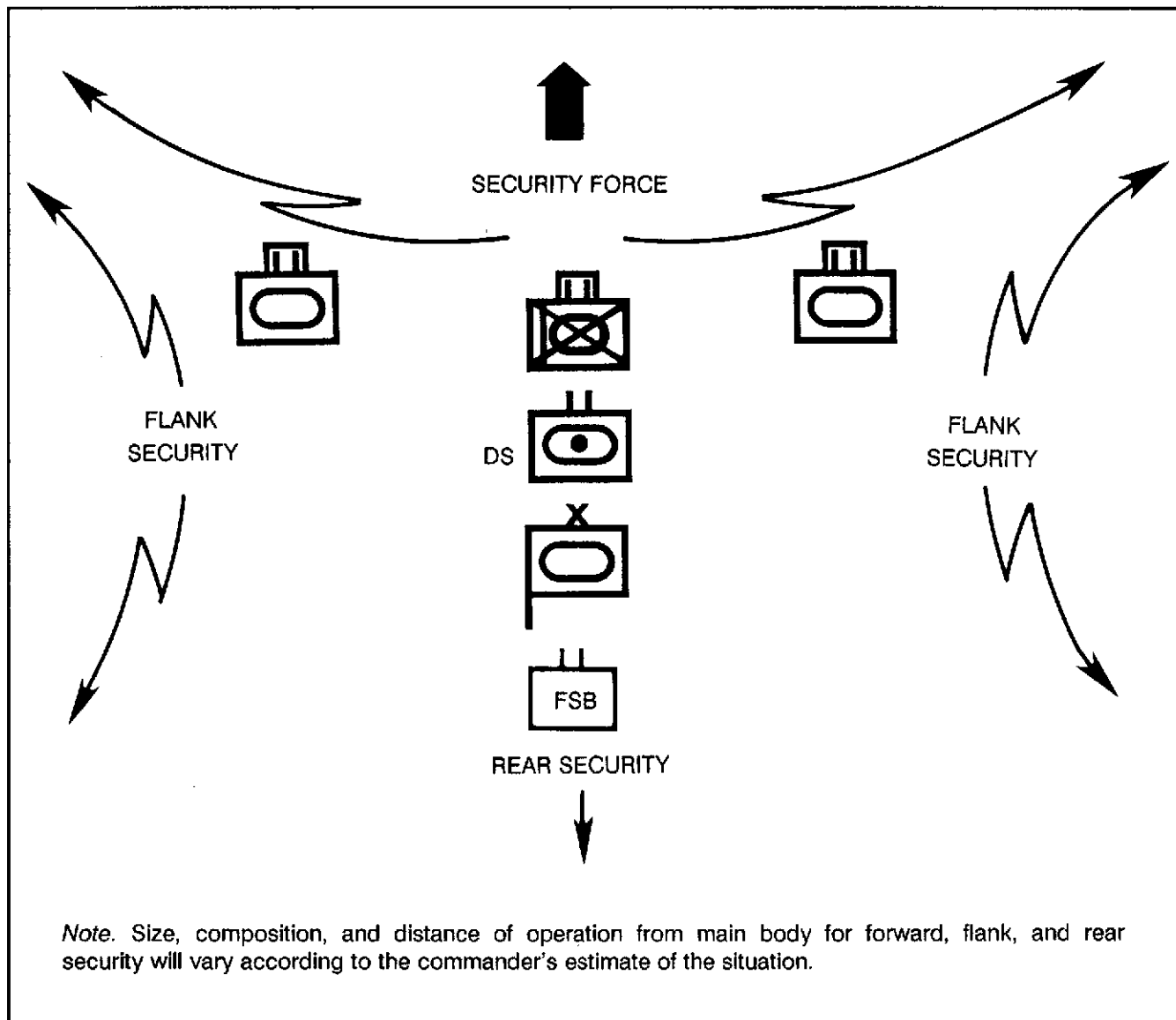


Figure 3-7. Brigade on Line Without a Reserve.

The brigade maintains flexibility in execution. Regardless of the initial formation for an attack, rigid adherence to formations and fire support plans contradicts the basic concepts of the attack. Subordinates freely exercise initiative to exploit enemy weakness within the context of the operation to achieve the commander's intent.

Section VIII. TYPES OF OFFENSIVE OPERATIONS

The types of brigade offensive operations are —

- Movement to contact.
- Hasty attack.
- Deliberate attack.
- Exploitation.
- Pursuit.

The brigade is trained and task organized to pass from one operation to another without delay. The types of operations may be conducted in sequence in a successful battle, beginning with a movement to contact to locate the enemy and ending with the destruction of the enemy through pursuit.

MOVEMENT TO CONTACT

Movement to contact is conducted to gain or reestablish contact with the enemy. It is used to develop the situation early to provide an advantage before decisive engagement. The brigade conducts a movement to contact as part of a larger formation. For instance, the brigade would conduct a movement to contact if it were the corps covering force. The movement to contact is characterized by decentralized control and rapid commitment of forces from the march. It ends with the occupation of an assigned objective or when enemy resistance requires the brigade to deploy and conduct a coordinated attack to continue forward progress.

During the movement to contact, the brigade can provide its security by posting flank and rear security screens as appropriate. This is not necessary when the flank(s) or rear are protected by adjacent or following friendly units. Forward security must be established by the use of a forward security force. In the separate

brigade, this is an ideal mission for the brigade's cavalry troop. In divisional brigades, the forward security force is provided by the lead battalion TF(s). The size and composition of the force are based on METT-T, particularly the width of the brigade sector and the enemy

situation. The forward security force conducts reconnaissance, develops the situation, destroys enemy reconnaissance elements, secures key terrain, reports and (if possible) breaches obstacles, and prevents unnecessary or premature deployment of the main body of the brigade.

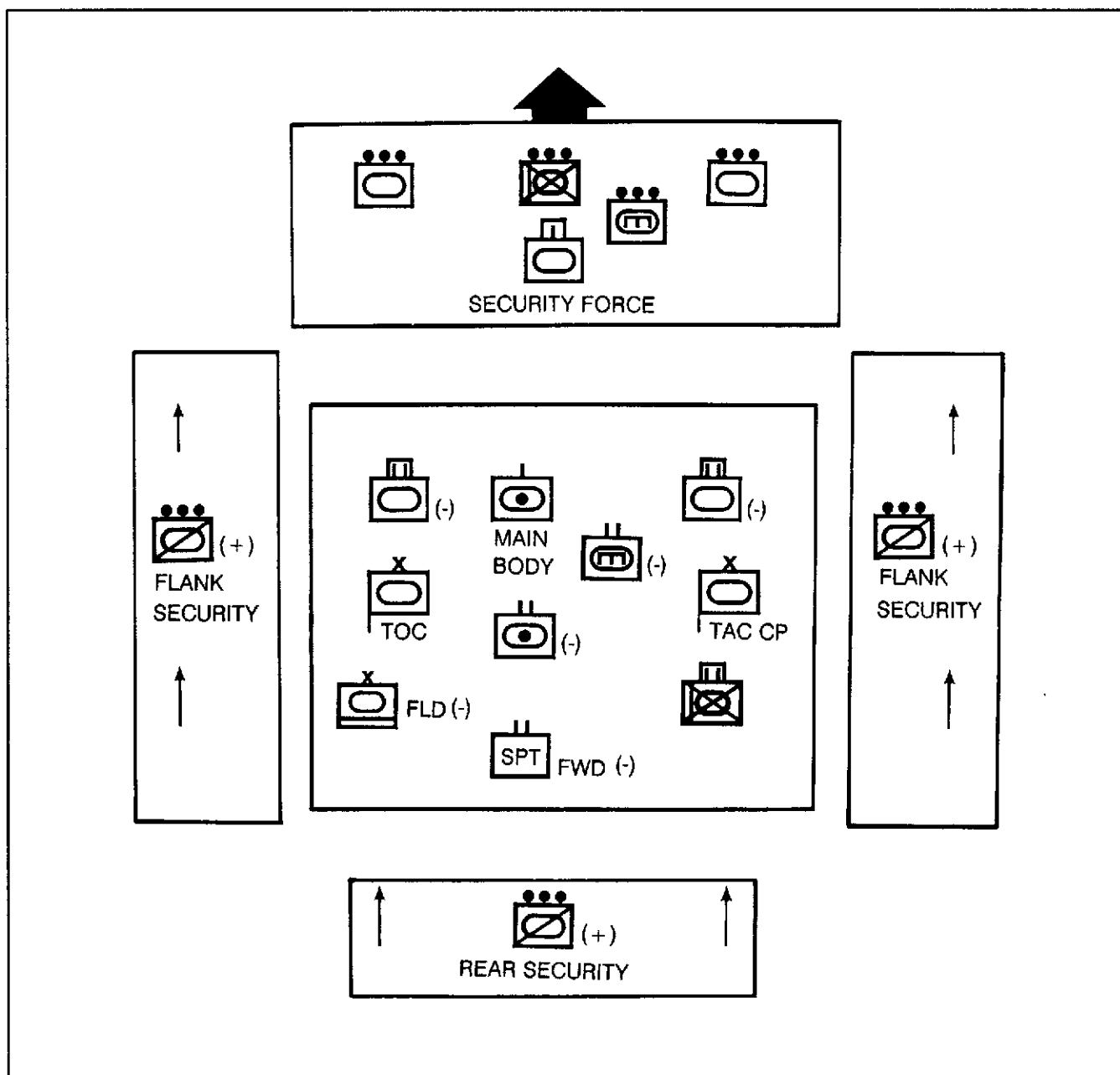


Figure 3-8. Movement to Contact.

The main emphasis is placed on the best use of roads and terrain. The brigade conducts aggressive reconnaissance to identify enemy locations, obstacles, and areas of possible NBC contamination and prepares to overcome obstacles and rapidly pass through defiles. Normally, movement is conducted in multiple columns. Subordinate battalions adopt the formations that best enable them to accomplish their missions.

Long-range surveillance assets may locate the enemy before physical contact is made. To counter the enemy's long-range surveillance capabilities, security for a moving force must operate far enough from the main body to allow the commander adequate reaction time. Security is enhanced by rapid movement, by continuous ground and air surveillance of the brigade area of operations, and by limited use of radios.

The brigade integrates fire support into march columns and attack formations. Normally, this includes one FA battery immediately behind the lead TF and the remainder of the battalion behind the following TF. Reinforcing FA battalions are positioned well forward by the brigade, normally behind the second TF.

Brigade AD protection is provided by all elements observing and providing fires with all available weapons. ADA occupies selected sites along the route of march and integrates into the moving column. These elements provide low-altitude air defense. See FM 44-1, FM 44-3, and FM 44-16 for detailed discussions of AD procedures applicable to this offensive operation.

Main body elements may be committed to reduce pockets of resistance or bypassed enemy forces. Strongpoints and reserve locations are often bypassed by the brigade when higher headquarters permits.

The decision to attack, bypass, or defend must be made rapidly at each echelon. This decision is governed by the understanding of the division commander's intent. Commanders should not hesitate to take appropriate action in the absence of orders. While efforts to retain the initiative remain decentralized, the decision to commit the entire force or to halt the attack remains with the senior commander.

HASTY ATTACK

A hasty attack is usually conducted following a movement to contact or when unexpected enemy contact is

made. There are three phases to the hasty attack: advance of reconnaissance and security elements, deployment and assault by security forces, and assault by the main body. The brigade conducts a hasty attack to maintain momentum with the resources immediately available.

Attacking units may bypass local obstacles and stubborn pockets of resistance that do not threaten overall success according to the higher commander's intent. Bypassed enemy forces then become the responsibility of the higher commander. Also, the directing maneuver headquarters needs to retain some ability to reinforce fires and redirect maneuver with minimum oral instructions. The most effective means of accomplishing this goal is with an operation overlay that reflects the higher commander's intent and scheme of maneuver. The overlay gives each command echelon flexibility to mass fires and modify maneuver plans as the situation develops.

The most critical control measures are objectives, phase lines, checkpoints, axes of advance, and boundaries. Intermediate objectives may be used to coordinate the essential movements of attacking forces, but their excessive use can reduce the momentum of the attack. On-order objectives are used to orient following forces and reserves quickly and increase the flexibility of tactical maneuver throughout the force.

Fire support planning for the movement to contact and the hasty attack is a continuous process. The operation needs extremely responsive fire support to compensate for the relatively small amount of maneuver power initially echeloned forward. Artillery units are available to move to forward firing positions by being integrated into march columns and attack formations. Displacement of artillery must be controlled so that fire support to committed units is not interrupted. The majority of fire support assets stays within the area of the main force. The division continues to attack deep targets, suppresses enemy air defense, and provides counterfire.

The brigade commander and FSCOORD consider major tactical contingencies and ensure the lead TFs and subsequently committed TFs have adequate fire support. Fire request channels must be kept open to all units.

The ground commander must visualize the critical points in the battle where deep fires will be most useful.

In the movement to contact and hasty attack, tactical air support and deep fires can be used to interdict the movement of enemy counterattack forces, isolate the enemy at times and places critical to the brigade, and to destroy the enemy's artillery units, CPs, and logistics units.

When the maneuver force attacks, the attacking maneuver battalions should receive SHORAD priority.

During movement to contact and hasty attack, engineers—

- Provide breaching support to maneuver forces.

- Protect flanks by creating obstacles on avenues of approach.
- Maintain routes.
- Assist in organizing captured ground against counterattacks.

When opposing forces are moving, the initial advantage in hasty attacks belongs to the force that first fixes and contains the enemy, deploys into combat formations, and maneuvers additional forces to the flank and rear, where the enemy is destroyed by fire or assault.

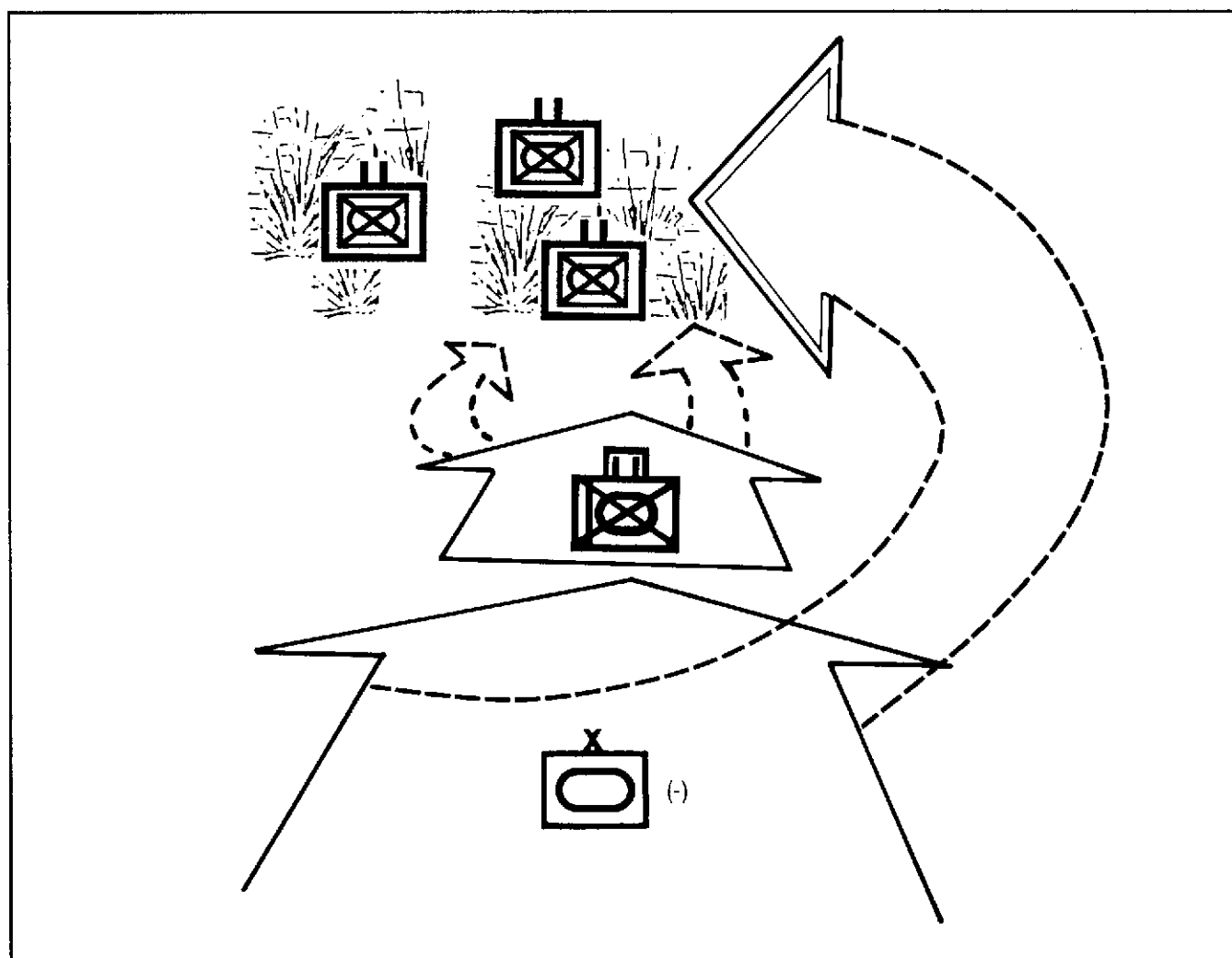


Figure 3-9. Hasty Attack to Envelop a Flank.

Preparation time is short, and orders must be brief during the hasty attack. The brigade commander should be with the lead TF that has the most critical mission to the overall operation. Although TAC CPs need to be close to their commanders for assistance in battle direction and information flow, their movement cannot be allowed to interfere with attack formations.

Commanders ensure visual contact is maintained with leading units. When one TF follows another, the scout platoon of the following TF may be positioned forward. The TF commander should monitor the leading force's command net (eavesdrop). If hasty attacks are not succeeding, the commander may elect to establish a hasty defense on the best defensible terrain until greater combat power can be brought to bear.

DELIBERATE ATTACK

A deliberate attack is characterized by detailed reconnaissance, thorough planning and rehearsal, rapid concentration of forces, surprise, attack on enemy weaknesses, violent execution, early shift to exploitation, and positive, aggressive leadership at all echelons of command. A deliberate attack is conducted when offensive operations are directed and—

- A hasty attack has failed.
- The enemy is well organized and cannot be turned or bypassed.
- Lead time is available for intelligence gathering and offensive preparation.

Organization for Combat

The factors of METT-T influence each situation in which a deliberate attack must be made and prevent development of a standard organization for combat. While the commander's estimate process must be conducted for each deliberate attack, general rules can be stated. The brigade commander organizes forces to fix and to maneuver against the enemy. Engineers are task organized to the force penetrating the enemy's

defensive positions. An intelligence collection effort is conducted to locate enemy reserves and second-echelon forces. Fire support planning is characterized by the full integration of intelligence gathering sources into the targeting process. The brigade FA uses division artillery (DIVARTY), the division FA intelligence officer, and brigade controlled intelligence sources to locate high-payoff targets. Fires are planned at high-payoff targets to support both the close and deep operations. Fire support systems are positioned well forward and in depth to provide continuous support throughout the attack. Displacement of fire support systems is executed to maintain continuous fire support.

Conduct of the Deliberate Attack

An indirect-fire preparation may be delivered immediately before the attack. Fire preparation is coordinated with the movement of attacking units depending on the amount of surprise desired or necessity to soften the point of attack. Attacking units move rapidly from dispersed locations under cover of phase III preparatory fires.

The attack plan is vigorously executed, and all favorable developments are exploited. If the attack lags in one portion of the zone, the main effort is shifted to another portion offering a greater opportunity for success. The progress of the attack is not delayed to preserve the alignment of units or to adhere to the original plan of attack. Follow and support units reduce isolated enemy resistance as necessary.

The attack may be a single, rapid advance and assault until the brigade objective is secured, neutralized, destroyed, or overrun, or it may be a series of rapid advances and assaults to obtain the same results. As enemy resistance is encountered, the attacking echelons converge, following close behind their supporting fires, until they are within assaulting distance of the hostile position. After the assault, attacking units disperse as rapidly as possible (to preclude forming lucrative targets), continue the attack, or prepare for other operations.

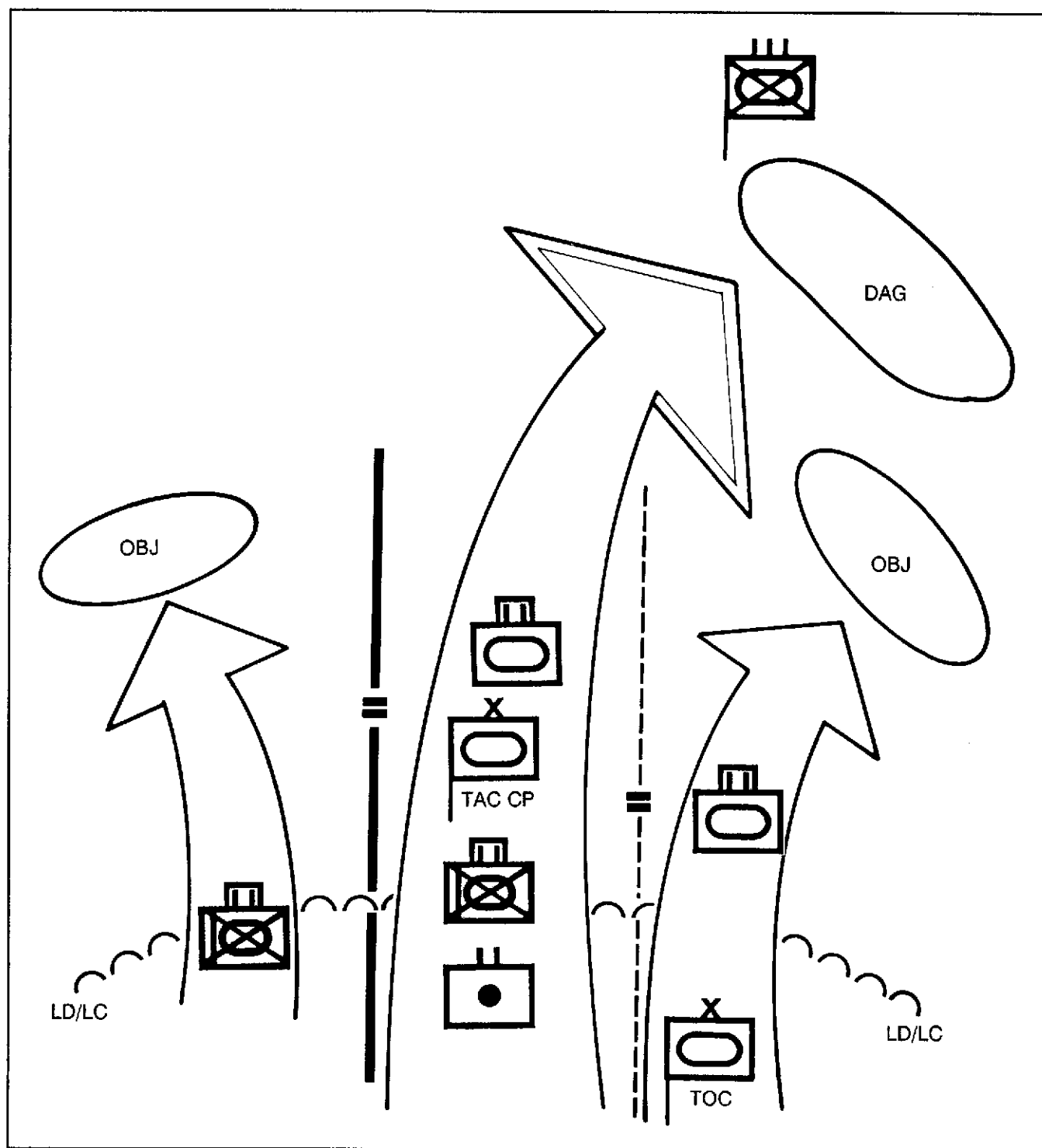


Figure 3-10. Deliberate Attack.

The reserve is kept ready for immediate employment. The reserve moves within the overall formation of the brigade and is positioned to permit rapid movement to the point of probable employment and to provide security by its presence. When conditions dictate its use, the reserve is committed without hesitation. The decision to commit the entire reserve or a portion thereof depends on the situation. With the compression of time and distance factors inherent in the mobility of the brigade, combined arms teams of the reserve can be assigned a specific short-term mission and the reserve quickly reconstituted.

Continuation of the Attack

When the brigade objective is secured, reorganization is accomplished rapidly, and all means are used to continue the attack (if so ordered). Maximum use of supporting fires is made during this critical period. Minimum forces normally retain control of objectives and remaining units disperse to defend themselves and the objective, prepare to continue the attack, and block enemy avenues of approach, if required. Ground mobile or air assault units maintain contact with the enemy, keep the enemy off balance, and obtain information.

Continuing the attack or exploitation must be an integral part of the attack plan. The disposition of the force at the objective should reflect the commander's intent for continuation of the fight. Immediate reorganization of the force is necessary to maintain momentum and prepare for the next phase.

Continuing the attack frequently depends on the ability to resupply attacking forces. Large quantities of ammunition, petroleum, oils and lubricants (POL), and equipment expended during the attack must be replenished. Provisions for this logistics support are an integral part of the attack plan. During continuous day and night operations, leading elements of the brigade are rotated to provide time for rearm and refit operations.

The commander must anticipate halts and prepare orders to include the time or circumstances of the halt, missions and locations of subordinate units, and command and control measures. To prevent congestion, some units may be diverted into defensive positions before the halt of the entire brigade.

EXPLOITATION

Exploitation is an offensive operation that follows a successful attack to take advantage of weakened or collapsed enemy defenses. Its purpose is to prevent reconstitution of enemy defenses, prevent enemy withdrawal, secure deep objectives, and destroy C2 facilities and enemy forces. During the exploitation, the brigade advances on a wide front (if the terrain and road net permit) retaining only those reserves necessary to ensure flexibility, momentum, and security.

The exploitation is initiated when an enemy force is having recognizable difficulty in maintaining its position. Although local exploitations may appear insignificant, their cumulative effects can be decisive.

Depending on the situation and its task organization, the brigade can exploit its own success, it can be used as an exploiting force for a higher echelon, or it can follow and support another exploiting force. The heavy brigade's inherent mobility, firepower, and shock effect make it an ideal exploiting force. Exploiting forces can have the mission of securing objectives deep in the enemy's rear, cutting lines of communications, surrounding and destroying enemy forces, denying escape routes to an encircled force, and destroying enemy reserves.

Preparation for the exploitation entails planning, issuing warning orders, grouping of exploiting forces, planning for CSS, and establishing communications. The commander must be ready at all times to use every opportunity afforded by the enemy for exploitation. Exploitation opportunities are indicated by an increase in prisoners captured; an increase in abandoned material; and the overrunning of artillery, command facilities, signal installations, and supply dumps. The transition from the deliberate attack to the exploitation may be so gradual that it is hardly distinguishable, or it may be abrupt. The abrupt transition occurs most frequently when nuclear or chemical munitions are used. After transition to the exploitation, every effort is made to continue the advance without halting, bypass enemy resistance when possible, and use available fire support to the maximum when appropriate targets are presented. Fire support target acquisition systems and observers are positioned well forward with lead elements.

Once the exploitation begins, it is carried out to the final objective. The enemy should be given no relief from offensive pressure. Enemy troops encountered are not engaged unless they are a threat to the brigade or cannot be bypassed. The decision to bypass or engage these enemy forces rests with the next higher commander. Normally, freedom of action is delegated to commanders in the exploitation. The leading elements of the brigade habitually attack from march column to reduce roadblocks and small pockets of resistance and to perform the reconnaissance necessary to develop the situation.

Follow and support units clear the bypassed areas and expand the zone of exploitation. Follow and support units are assigned missions to assist exploiting forces by relieving them of tasks that would slow their advance (such as preventing the enemy from closing the gap in a penetration and securing key terrain gained during a penetration or envelopment). Follow and support forces are allocated fire support as the situation dictates. As the exploiting brigade advances farther into the enemy's rear areas, the follow and support units secure lines of communication and supply, support the exploiting elements of the brigade, destroy pockets of bypassed enemy, and expand the area of exploitation from the brigade axis. Follow and support units relieve brigade elements blocking or containing enemy pockets, or protecting areas or installations, thereby enabling these elements to rejoin the exploiting force. Liaison must be maintained between lead units and follow and support units to facilitate coordination.

Decentralized execution is characteristic of the exploitation; however, the commander maintains enough control to prevent overextension of the command. Minimum control measures are used. CSS operations are normally decentralized.

Tactical air reconnaissance and Army aircraft maintain contact with the enemy movements and keep the commander advised of enemy activities. Close air support aircraft, deep FA fires, and attack helicopters attack moving enemy reserves, withdrawing enemy columns, and enemy constrictions at choke points. CAS, FA, and attack helicopters may also be used against enemy forces that threaten the flanks of the exploiting force.

Petroleum consumption rates are high; therefore, provision for rapid resupply is essential. Since forward elements may be operating to the rear of bypassed enemy forces, security of ground supply columns must

be considered. Aerial resupply may be necessary. Exploiting forces take advantage of captured supplies whenever possible.

PURSUIT

The pursuit normally follows a successful exploitation. The primary function of pursuit is to complete the

destruction of the enemy force. As a successful exploitation develops and the enemy begins to lose the ability to influence the situation, the brigade may be ordered to execute the pursuit. Unlike exploitation, in which the attacking force avoids enemy units in order to destroy their support system, in the pursuit the brigade may point its advance toward a physical objective; however, the mission is the destruction of the enemy's main force.

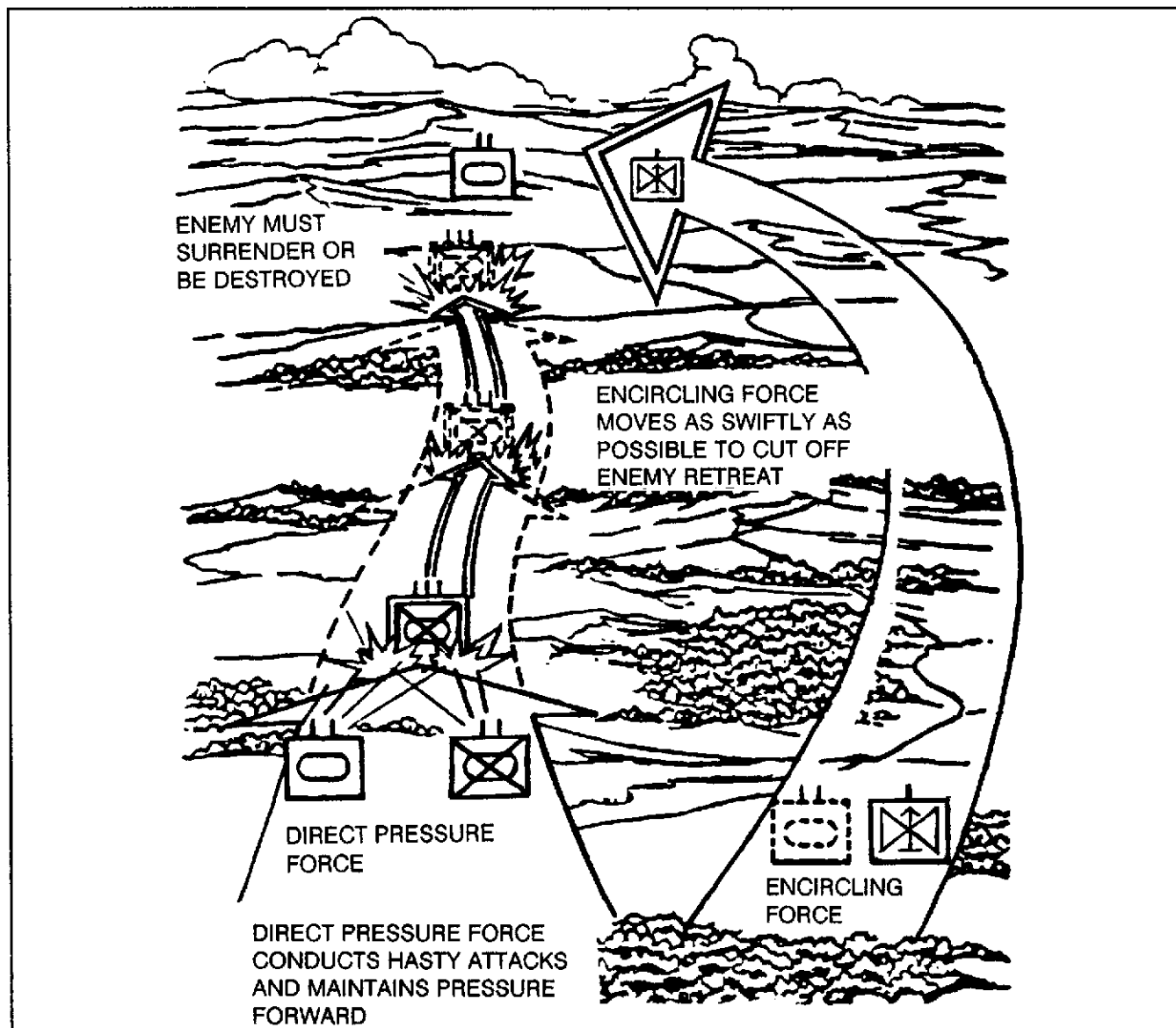


Figure 3-11. Pursuit.

Friendly forces in the exploitation are alert for indicators of an enemy collapse that would permit a pursuit operation. There are several indicators of a weakening enemy:

- Continued advance without strong enemy reaction.
- An increased number of captured prisoners, abandoned weapons, and unburied dead.
- A lessening of hostile artillery fire.
- A lack of enemy countermeasures.

The pursuit is ordered when the enemy can no longer maintain its position and tries to escape. The commander exerts unrelenting pressure to keep the enemy from reorganizing and preparing its defenses. The brigade may conduct a pursuit operation as part of a corps or division pursuit functioning as either the direct-pressure or encircling force.

The mission of a direct-pressure force is to prevent enemy disengagement and subsequent reconstitution of the defense and to inflict maximum casualties. Leading elements of the direct-pressure force move rapidly along all available roads. Leading elements contain or bypass small enemy pockets of resistance that are reduced by follow and support units. At every opportunity, the direct-pressure force envelops, cuts off, and destroys enemy elements, provided such actions do not interfere with its primary mission. The enemy is not allowed to break contact.

The mission of an encircling force is to get behind the enemy and block its escape so that it can be destroyed between the direct-pressure and encircling forces. The encircling force advances along or flies over routes paralleling the enemy's line of retreat to reach defiles, communication centers, bridges, and other key terrain ahead of the enemy main force. When conditions permit, brigades attempt a double envelopment of retreating enemy main forces or their subordinate elements. Hostile rear guards or forces on flank positions are not permitted to divert the main force from its mission. Air assault, armored, and mechanized units supported by engineers are particularly effective as enveloping forces. If the encircling force cannot outdistance the enemy, it attacks the enemy main body on its flank. If the enemy's main force establishes itself on a position from which it cannot be easily dislodged, the pursuing commander launches a hasty attack promptly to restore fluidity.

Fire support systems are placed well forward with the lead elements of the direct-pressure force. Positioning facilitates the delivery of fire support for both the direct-pressure and encircling force. Fire support performs two key tasks in the pursuit: slowing the retreat of enemy forces and preventing resupply and reinforcement of enemy force fires. Brigade CSS assets should follow the direct-pressure force to enhance their security.

Section IX. OTHER OFFENSIVE OPERATIONS

In addition to the five major types of offensive operations, the brigade must also be prepared to conduct the following special-purpose operations:

- Reconnaissance in force.
- Raid.
- Feint.
- Demonstration.

RECONNAISSANCE IN FORCE

A reconnaissance in force is a short-duration, limited-objective operation conducted to obtain information,

locate enemy dispositions, test enemy strengths, and develop the situation. Although its primary aim is reconnaissance, it may discover weaknesses in the enemy disposition which (if promptly exploited) could lead to tactical success. The brigade commander may conduct his own reconnaissance in force or conduct a reconnaissance in force at the direction of a higher headquarters. When planning a reconnaissance in force, the commander must decide if—

- The desired information is important enough to justify the risks.
- Other intelligence collection agencies can obtain the needed information faster or with less risk.

- The reconnaissance will produce the desired information.

The reconnaissance in force must be strong enough to force the enemy to react, thus disclosing the enemy's locations, dispositions, strength, planned fires, and planned use of reserves. The commander uses fire support to deceive the enemy as to the strength and mission of his force.

A terrain objective that (if threatened or occupied) will cause the enemy to react is most often used; however, the objective of the reconnaissance is to obtain information, not to occupy terrain. If the enemy situation along a front is to be developed, the force conducting the reconnaissance advances along its front employing strong aggressive probes to determine the situation at critical points. Such action keeps the enemy off balance, discloses its dispositions over a broad area, and develops the location and planned use of its reserve.

Although a reconnaissance in force is a type of offensive action, restrictions may be placed on commanders to avoid actions that might precipitate a general engagement. The brigade commander exploits the success obtained by a reconnaissance in force primarily to continue the attack or to retain control of terrain seized by the force. The brigade commander assists in the disengagement of the subordinate reconnaissance force if it becomes decisively engaged. Sufficient reserves are maintained to exploit success or enemy weaknesses or to extricate the force should it become necessary. If still engaged upon completion of the reconnaissance mission, the force may fix the enemy, attack, or withdraw as directed.

RAID

A raid is usually a small-scale offensive tactical operation. It is based on detailed intelligence, involves swift movement into hostile territory, and ends with a planned withdrawal. Typical raiding missions follow:

- Capture prisoners, installations, or enemy material.
- Destroy enemy material or installations.
- Obtain specific information of a hostile unit such as its location, disposition, strength, or operating scheme.

- Deceive or harass enemy forces.
- Liberate friendly, captured personnel.

The raid operation is appropriate to the brigade because of its capabilities for shock, speed, mobility, and firepower. Normally, raids are so short in time and distance that only a limited amount of supplies can be carried on the combat vehicles. Maintenance support is confined to the crews' ability to make minor repairs.

Fire support systems are positioned during a raid to support the attacking force throughout the operations. High-payoff targets are attacked to provide the maximum shock effect on the enemy's force. Interdiction fires, counterfires, and FASCAM are delivered to reduce the enemy's ability to react to the raid.

After reaching the objective and accomplishing the mission, the raiding force can anticipate vigorous enemy reaction in the area through which they have passed. For this reason, the withdrawal of the raiding force is usually over alternate routes. Brigade forces should avoid main lines of communication and should consider using routes for attack and withdrawal that are not usually considered feasible for mechanized movement.

Once the brigade raid objective has been achieved, no time is wasted in returning to friendly territory. The longer the withdrawal is delayed, the greater the chance the enemy has of defeating the raiding force. In this phase of the raid, the operation corresponds to techniques used during linkup.

When Army aviation assault and attack helicopter assets are available, an aerial raid may be conducted with dismounted infantry to quickly move behind enemy lines, perform the required mission, and return.

FEINTS AND DEMONSTRATIONS

A feint is a limited objective attack; it is a show of force intended to deceive the enemy and draw attention and (if possible) combat power away from a main attack. Feints must be of sufficient strength and composition to cause the desired enemy reaction. Feints must appear real; therefore, some contact with the enemy is required. The feint is most effective when it reinforces the enemy's expectations, when it appears as a definite threat to the enemy, when the enemy has a large reserve

that has been consistently committed early, or when there are several feasible courses of action open to the attacker. Some of the desired reactions are to force the enemy into improper employment of its reserves, attract enemy supporting fires away from the main attack, force the enemy to reveal defensive fires, or accustom the enemy to shallow attacks in order to gain surprise with a deep main attack. Normally, the brigade executes a feint as part of a corps or division attack plan. Planning for a feint follows the same sequence as any other offensive operation.

A demonstration is an attack or show of force in an

area where a decision is not being sought. It is made with the intention of deceiving the enemy; however, no contact with the enemy forces is made. Demonstration forces use fires, movement of maneuver forces, smoke, EW assets, and communication equipment to support the deception plan to include firing false artillery preparations and delivering fires comparable to a thrust forward in a deliberate attack. A demonstration may be performed by a reserve battalion; however, care must be exercised to ensure the reserve is in position when required for employment.

Section X. LIMITED-VISIBILITY OPERATIONS

The combination of improved ammunition and modern fire control systems demands that the heavy brigade train to fight in darkness. Modern night-vision devices provide the brigade with the capability to fight at night almost as it fights in daylight, although weapon range capabilities and target acquisition will be somewhat degraded.

Morale of friendly and enemy troops is highly sensitive to physical and psychological factors. As B. H. Liddel Hart said, "Darkness is a friend to the skilled soldiers but a cause of confusion to the unskilled." Reverses and failures at night affect troops more than the same reverses would in daylight. Well-trained troops, confident of their ability to fight at night, can use these psychological factors to their advantage.

The brigade attacks at night to achieve surprise; continue an attack that began in daylight; gain important terrain for further operations; negate enemy strengths (such as air and armor superiority, extensive obstacle systems, large fire sacks); or take advantage of enemy weaknesses (such as lack of night-vision devices, maintenance of contact against attrited enemy).

The success of night offensive operations depends on the organization of forces and distribution of organic night-vision equipment, careful concealment of preparations, skillful control of maneuver forces, coordination of support elements, and training in individual fighting skills by the attacking brigade.

The concept of the night attack must be simple and planned in detail. The same considerations of planning,

preparation, and conduct that apply to daylight attacks also apply to night attacks. The scheme of maneuver, fire support plan, and graphic control measures are carefully specified to enhance command and control. Well-defined objectives and routes simplify control. Deep division objectives may require a series of intermediate objectives be assigned to attacking units to facilitate control and to aid in maintaining direction. The use of smoke is integrated into limited-visibility offensive operations to degrade Threat electro-optical (passive) systems and enhance the maneuver potential of the combined arms teams.

The most important element in planning night offensive operations is reconnaissance. Leaders at all levels must move forward to conduct their own reconnaissance not only to gain information but also to become familiar with landmarks and terrain over which their forces will attack.

If possible, reconnaissance should be conducted in daylight or before initiation of smoke and again during periods of reduced visibility. Sketch maps (if required) can be made to supplement previously distributed orders and graphics. Plans must be developed through reconnaissance to enable the brigade to press attacks initiated during daylight into periods of reduced visibility.

In determining whether an artillery preparation will be fired, its probable effects on maneuver must be weighed against the effect of greater surprise stemming from an attack by stealth. When an artillery preparation is not fired, on-call fires are planned to be used if

surprise is lost. In addition to normal fires, fires are planned to cover the attacking force if it must withdraw and to isolate the area of the attack. Indirect fires may also be used to cover the sound of advancing armored formations or aid in deception plans.

Use of battlefield illumination can aid the maintenance of direction, facilitate coordination, control maneuver forces, and assist in target acquisition;

however, it may reduce the element of surprise and negate our night-vision device superiority over the Threat. Its use must be carefully coordinated to avoid detrimental effects in adjacent brigade areas. The primary means of illuminating the night attack is by mortar or artillery flares. Forces equipped with thermal imagery fire control systems normally do not use battlefield illumination to support their scheme of maneuver.

Section XI. BRIGADE AS A COVERING FORCE

A covering force is a tactically self-contained security force that operates a considerable distance to the front or rear of a moving or stationary force. Its missions are to develop the situation early; defeat hostile forces (if possible); and deceive, delay, and disorganize enemy forces until the main force can cope with the situation.

The brigade may participate in a covering force mission as part of a division that in turn the covering force for a corps, or as a complete covering force for a division or corps. Because the brigade as a covering force will be operating on a broad front, a well-prepared, coordinated plan is required. The plan must reflect centralized, coordinated planning and decentralized execution. Control measures governing the rate and direction of movement are specified. The rate of movement is controlled by successive march objectives, checkpoints, and phase lines. The axis of advance or withdrawal may be controlled by establishing boundaries between battalion TFs. Army aircraft may be used to provide auxiliary communication, liaison, and other controls between commands.

The brigade normally operates 15 km to 30 km in front of the division main body. The brigade may have

up to three or more TFs abreast operating in TF zones keyed on high-speed routes. Tank-heavy battalion TFs usually lead the advance. Engineers are kept well forward with the TFs. When the brigade conducts a covering force operation, supporting CS and CSS assets are attached to preserve unity of command. Small tank-heavy reserves may be maintained at both battalion level and brigade level to influence local actions.

Covering force actions are characterized by speed and aggressiveness (especially in reconnaissance) by developing situations rapidly with strength, by unhesitating commitment of reserves, and by keeping the enemy off balance. The brigade concentrates its attention against enemy forces that are of sufficient size to threaten the main force. Minor resistance is bypassed. Every action is directed toward ensuring the uninterrupted advance of the main body.

Tailored, mobile, high-demand CSS is moved forward with the brigade. Limited Classes III and V supplies and medical triage and evacuation assets move with and are provided march security by the reserve battalion of the brigade.

CHAPTER 4

DEFENSIVE OPERATIONS

The main purpose of a defensive operation is to cause an attack to fail by destroying enemy forces. Brigades may perform a variety of missions in support of a division- or corps-level defense. They may attack, defend, or delay across the full spectrum of the defensive framework as part of the security, main battle area (MBA), or reserve force. Brigades may also conduct offensive operations across the forward line of own troops

(FLOT) while the majority of the division or corps defends, or they may serve as a ground tactical force in support of rear operations. Heavy brigades possess the combat power to conduct offensively oriented maneuver defense. This could be a mobile defense or a combination of the mobile and area defensive patterns. This chapter outlines how brigades defend within the higher commander's intent.

Section I. CHARACTERISTICS OF DEFENSIVE OPERATIONS

The fundamental objective of the defense is to regain the tactical initiative through offensive action. Brigade defenses combine fires, obstacles, and maneuver to create and exploit the exposed flank and rear of the enemy. Locally, the brigade uses existing and reinforcing obstacles to disrupt, canalize, and structure the enemy attack. The enemy is forced onto unfavorable terrain where strong combined arms task forces mass frontal and flanking fires from mutually supporting battle positions. Additional TFs attack the depth of the

enemy. Attack helicopters overwatch counterattacking or delaying forces and attack follow-on echelons in depth. Electronic warfare destroys the enemy's ability to command and control its forces and synchronize its artillery and air support. Indirect fires delay and weaken enemy forces, causing them to button up and change avenues of approach and limiting their ability to resupply and reinforce committed forces. Smoke masks friendly locations, isolates enemy echelons, degrades the enemy's target acquisition, and further slows enemy maneuver.

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As the enemy's momentum slows, the defender uses every opportunity to attack with lightly or uncommitted forces within the higher commander's intent. The defender regains the tactical initiative through a combination of physical destruction and psychological shock as the enemy's will to fight erodes.

The brigade's offensive freedom of action in defensive operations depends on the higher commander's

intent. At times, the brigade may be required to retain key terrain. The brigade's mission to retain key terrain may be ordered if it assists or creates an opportunity for the higher headquarters to shift to the offensive. Inevitably, the brigade defense focuses on regaining the tactical initiative or creating the opportunity for its higher headquarters to shift to the offensive.

Section II. DEFENSIVE FRAMEWORK

Brigades use either a mobile or area defense. Mobile defense uses large reserves to counterattack and envelop enemy forces. Area defense focuses on retaining terrain and destroying enemy forces by fire from mutually supporting positions. Both patterns use a combination of static and dynamic elements to shape the battlefield.

The defense is organized into five complementary elements:

- Deep operations in the area forward of the FLOT.
- Security force operations forward and to the flanks of the defending force.
- Defensive operations in the MBA.
- Reserve operations in support of the main defensive effort.
- Rear operations.

Brigades may perform a variety of missions within the defensive framework. As part of the security force

element, the brigade could act as the security force for the higher commander, or it could provide its own security force, although this is not desirable. Normally, brigades defend within the MBA or act as the higher commander's reserve.

Brigade-controlled deep operations primarily consist of air, FA, and EW interdiction. The brigade may also attack across the FLOT in support of the higher commander's scheme of maneuver.

The brigade's rear operations include self-protection of its units and protection and maintenance of its lines of communication. The brigade normally designates a tactical force to react to rear threats. The brigade may also be tasked to provide tactical forces to support the higher commander's area of operations.

Regardless of where the brigade is defending, it defends, delays, attacks, and screens as part of the defensive battle. The brigade's defensive plan must provide for synchronization of its operating systems throughout the defensive area of operations.

Section III. HOW THE THREAT ATTACKS

Fundamental concepts of Threat offensive doctrine are:

- Mass. Victory is most easily and, in the end, economically achieved by overwhelming the enemy with numbers.
- Momentum. Numbers with speed destroy an enemy quickly. Although losses may be high at first, quick collapse of the defender makes the mass-speed combination more economical in the long run. The Threat bypasses significant resistance and reinforces success to increase momentum.

- Continuous combat. By applying mass continuously—during night, day, bad weather, limited visibility—the Threat expects to achieve and sustain momentum, overwhelm friendly forces, and destroy their ability and will to defend.

See FM 100-2-1, FM 100-2-2, and FM 100-2-3 for additional detailed information on Threat operations.

Section IV. FUNDAMENTALS OF THE DEFENSE

On nonlinear battlefields, units of the division may be bypassed, penetrated, or encircled without loss of overall defensive integrity; however, a massive penetration that threatens the integrity of the defense in depth cannot be permitted. Risks must be taken, but the fighting strength of the division and brigade must be conserved and cohesion maintained.

Defense is based on careful IPB. The defending brigade commander plans selective attacks against deep, high-payoff targets to create opportunities for offensive action. The defender uses fire support, EW, and maneuver in depth to isolate leading enemy formations and to delay, disrupt, and destroy enemy follow-on forces. The defender attempts to degrade the enemy's momentum by attacking its follow-on forces, CS, CSS, and command and control to make it more difficult to employ artillery or reinforce, resupply, and direct its attacking echelons. The defender's attacks must begin as early as possible and continue throughout the battle.

Deception, OPSEC, fires, and maneuver against the enemy's flank and rear cause the attacker to dissipate strength and use up resources without gaining success. Deep, close, and rear operations are planned to support a coherent battle plan that enables defending forces to defeat isolated segments of the enemy force.

A properly conducted defense uses every available opportunity to seize the initiative. Once the enemy attacker has committed itself and moved into the defended area, the brigade commander strikes him with powerful fires and counterattacks in prepared engagement areas.

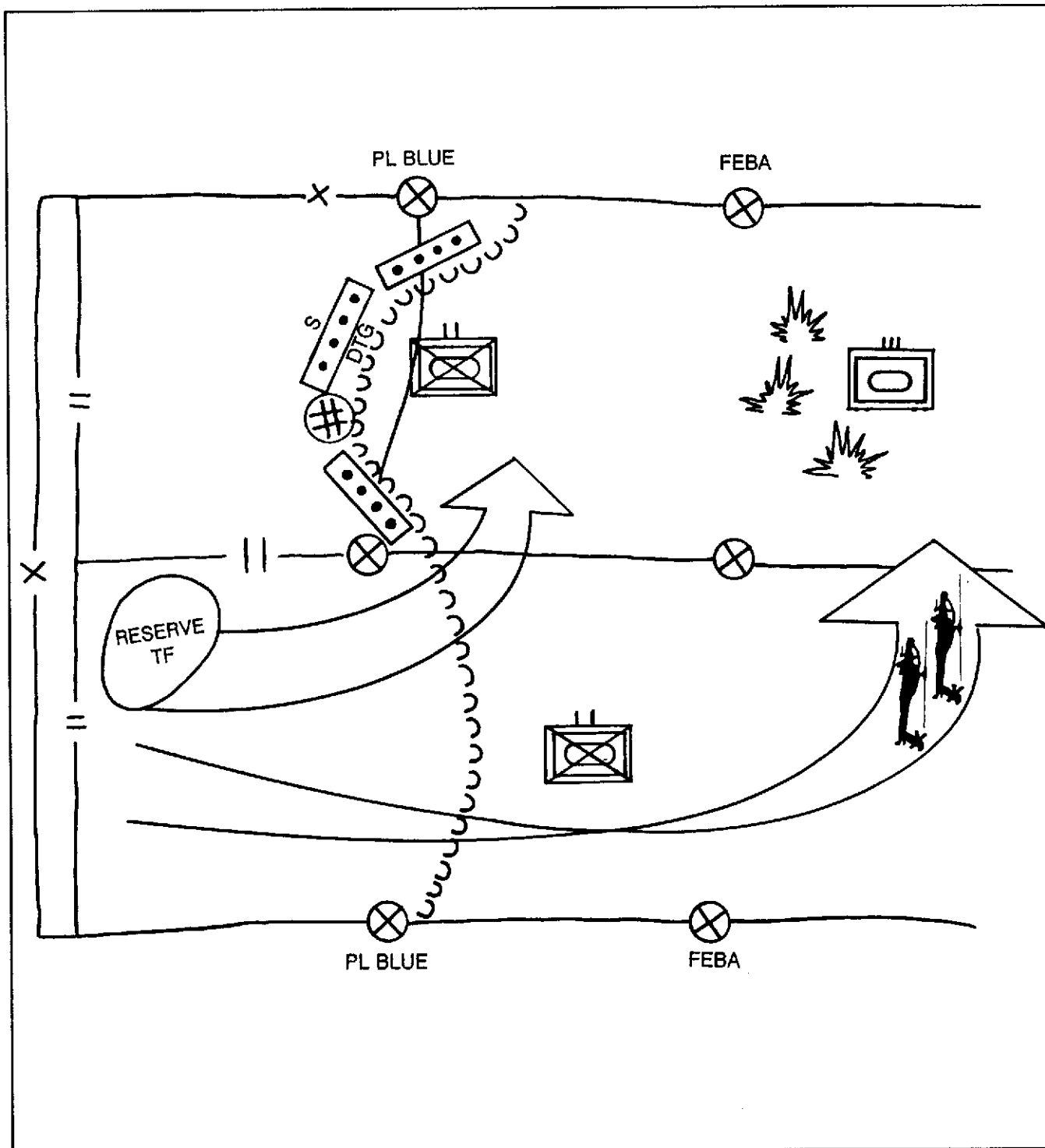


Figure 4-1. Brigade Defense Seizing the Initiative.

The initial purpose of the defense for the brigade is to gain time. This prevents quick enemy successes that would make a synchronized defense by the brigade impossible. Threat offensive doctrine aims specifically at causing a rapid collapse of the defense.

Based on his own estimate of the situation and the higher commander's concept, the commander decides where to concentrate his main defensive effort and where to economize forces. He then assigns missions; allocates forces, fires, and other support; and sets priorities for resources to fight a combined arms battle.

The brigade commander may elect to defend forward or in depth based on METT-T. A defense in the forward part of the sector requires early commitment of the main defensive effort. This may be achieved either by an initial forward deployment of forces or by planning counterattacks well forward in the MBA or even forward of the MBA. A defense in depth may be selected when missions are less restrictive, defensive sectors are deep, and key terrain lies deep in the sector. A defense in depth relies on elements in the security

force area and forward elements in the MBA to identify, define, and control the depth of the enemy main effort. The flanks of the enemy main effort are counterattacked to isolate and destroy enemy forces in the MBA.

In both area or mobile defense, the overall scheme makes the greatest possible use of maneuver and offensive tactics. When the enemy has committed its forces, the defender's chief advantage is the ability to seize the initiative and counterattack over familiar ground. Protected by his own defensive positions, the defender counterattacks to destroy the halted, disorganized enemy.

Brigade commanders organize the battlefield for defense by assigning sectors, battle positions, strongpoints, or a combination of all three to subordinate battalion TFs.

Sectors, the least restrictive control measures, give battalion TFs freedom to maneuver and decentralize fire planning. TF commanders have total freedom to position or maneuver within their sector but must prevent penetration of their rear boundary.

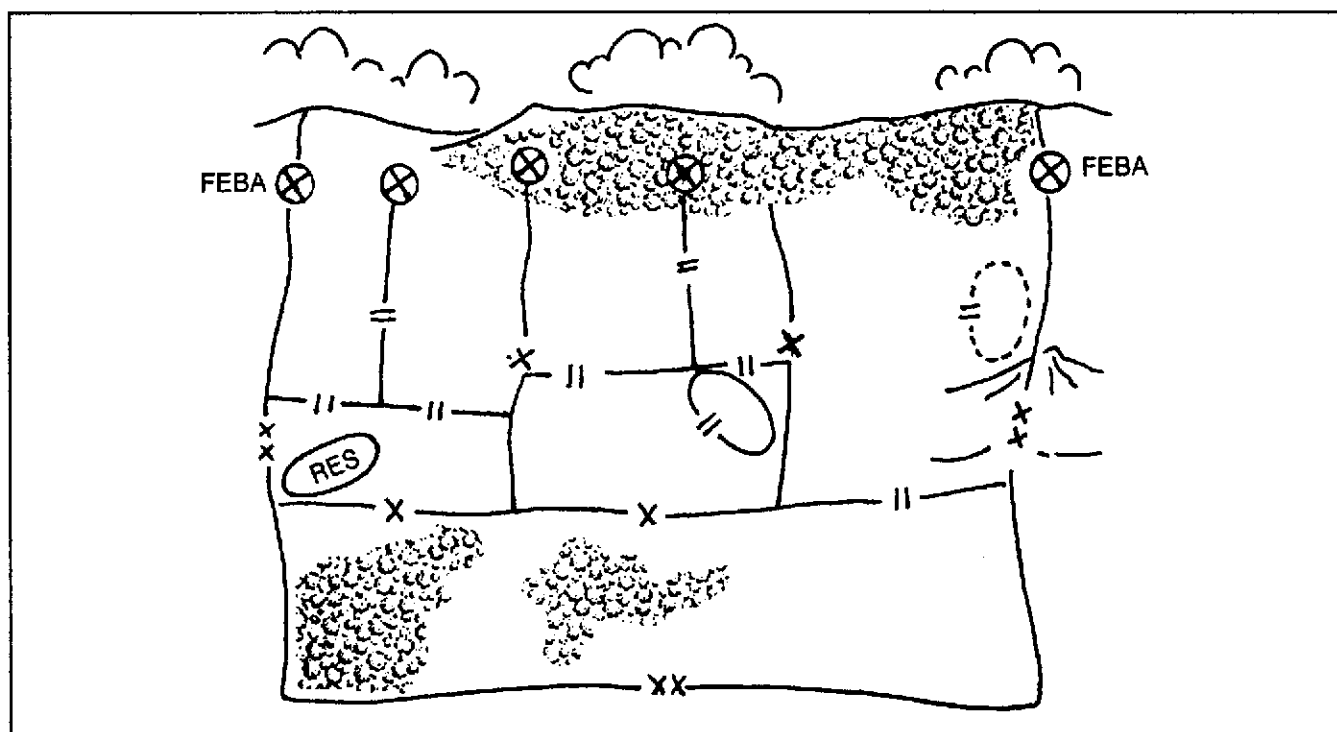


Figure 4-2. Sectors.

Battle positions are used when the brigade commander wishes to retain greater control over the maneuvering and positioning of his TFs.

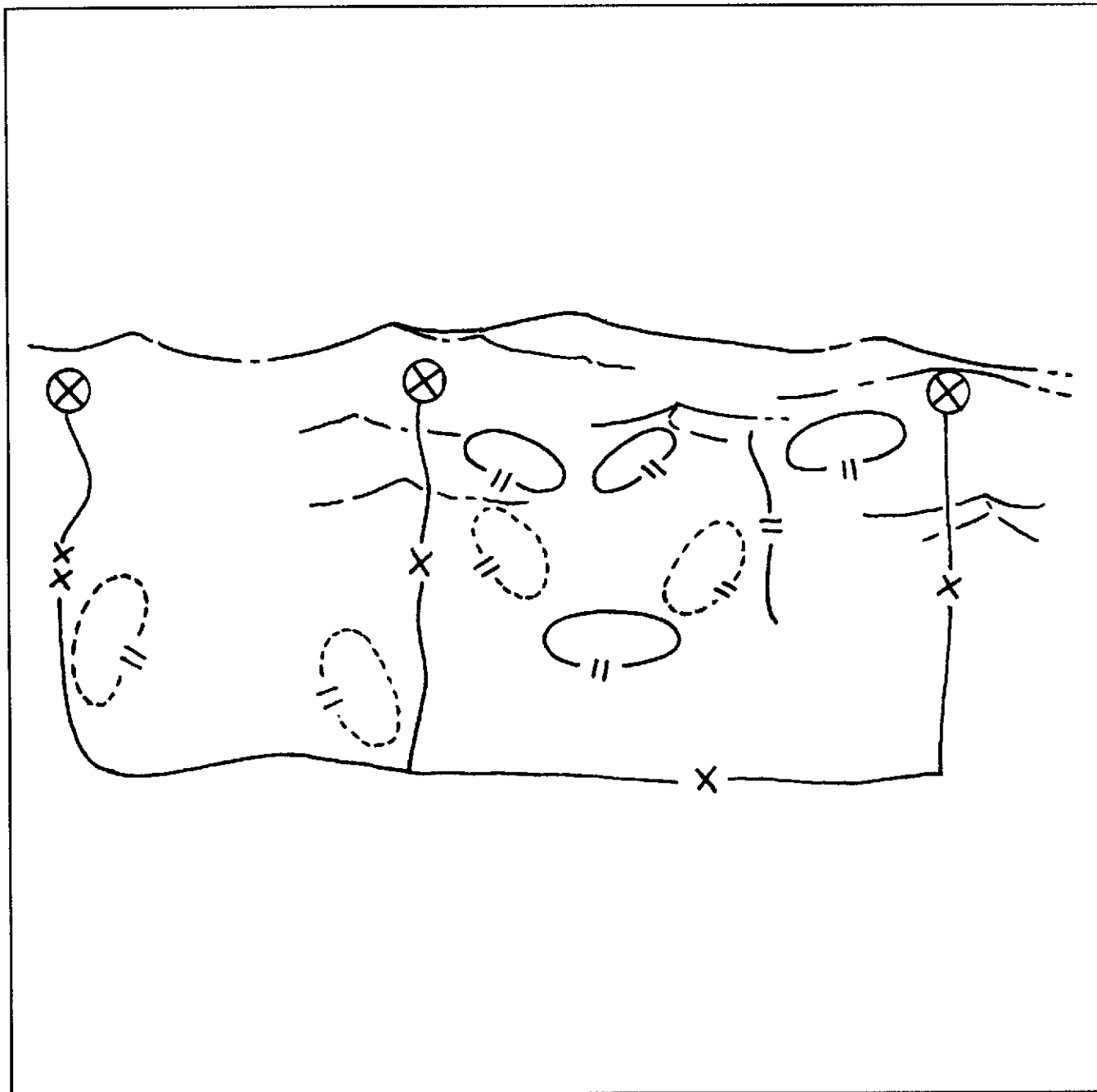


Figure 4-3. Battle Positions.

A strongpoint is a fortified defensive position. It is essentially an antitank nest that cannot be easily overrun or bypassed by tanks and can be reduced by enemy infantry only with the expenditure of much time and overwhelming forces. A strongpoint is located on a terrain feature critical to the defense or one that must be denied to the enemy. A strongpoint can be used to shape, contain, or fix the attacker. Extensive engineer support is required to successfully establish strongpoints.

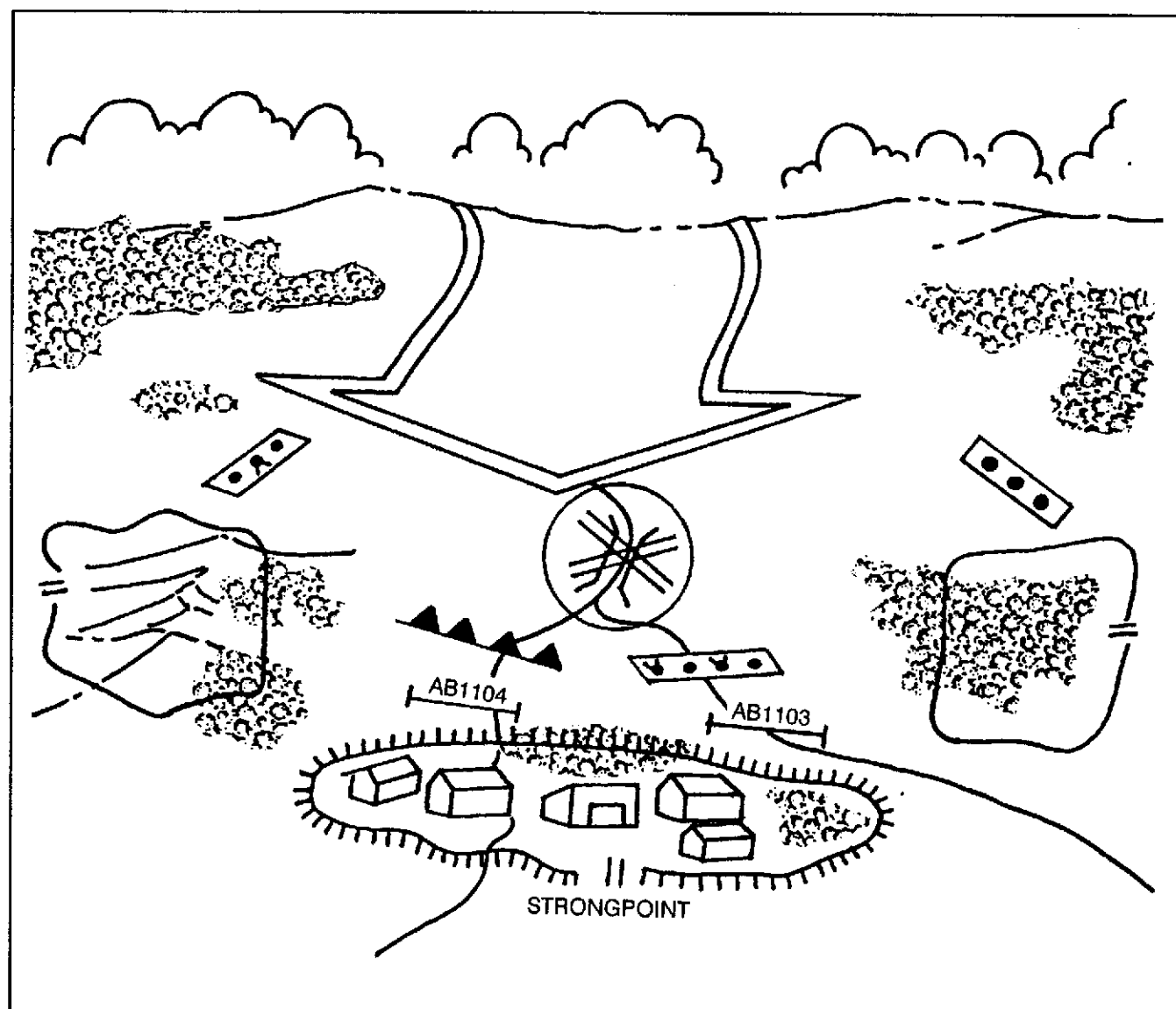


Figure 4-4. Strongpoint.

Depending on their missions, reserve forces are assigned to AAs or battle positions. Assembly areas are used when the plan for the reserve is to move to another area for employment. The reserve

is responsible for the security of the AA. Battle positions are designated if the reserve must defend in depth as a contingency mission.

Section V. PLANNING FOR THE DEFENSE

INTENT OF THE HIGHER COMMANDER

The brigade commander must thoroughly understand the corps and division commanders' intents and align brigade operations with the overall mission. The division commander's detailed intent, issued either in writing or orally, depicts the brigade's role in the division battle. A complete understanding of this intent and implied missions is required to permit initiative and ensure mission accomplishment. The brigade commander likewise transmits his intent to his subordinates.

The brigade commander should walk the critical portions of the defensive line with his battalion commanders. If this is impossible, at a minimum, he should have his subordinates backbrief him; this ensures they understand his intent and will implement plans in concert with the overall defensive concept. As a minimum, the brigade commander must consider —

- Intelligence preparation of the battlefield.
- Friendly maneuver unit combat power.
- Friendly scheme of maneuver and reserve location.
- Vulnerability to enemy nuclear and chemical weapons.
- Impact of deep and rear operations.
- Use of combat multipliers—fires, obstacles, EW, aviation.
- Logistics supportability of each course of action.
- The human factor—training, morale, experience of subordinates.

FRIENDLY MANEUVER UNIT COMBAT POWER

The brigade commander monitors the current combat power of assigned subordinate maneuver and CS units. Major killing systems and personnel fill,

especially dismounted infantry, must be closely tracked to ensure proper assignment of missions.

FRIENDLY SCHEME OF MANEUVER AND RESERVE LOCATION

Using obstacles, maneuver, EW, deception, and fire support, the brigade prevents the attacker from focusing its full strength at one time and place on the battlefield. These measures create confusion, dissipate the Threat's strength, and prevent it from maintaining the momentum of the attack. The brigade commander's tactical scheme includes plans to counterattack. Once exposed, precisely located segments of the enemy force are identified; they are attacked in the flank or rear whenever possible. The key to the execution of counterattack operations is the brigade reserve.

The Reserve

The brigade commander's most critical decision during the defense is the commitment of the reserve. Commitment of the reserve is the most effective way the brigade commander can influence the battle. Once committed, the reserve becomes the brigade main effort and claims priority of support. Early in his planning, the brigade commander makes fundamental decisions concerning the size, composition, and mission of the reserve. A major purpose of the reserve is to regain initiative through offensive action. The reserve does this by launching counterattacks, spoiling attacks, and raids against the enemy, preferably in its flanks and rear. Other purposes of the reserve are to —

- Block penetrations.
- Contain enemy forces that have penetrated.
- React to rear area and flank threats.
- Relieve depleted units and provide for continuous operations.

If the brigade commander does not have sufficient reserves of his own, he may require his subordinate TF commanders to obtain his permission before the employment of their reserves. He may also specify the location of their reserves. The brigade commander should retain about one-third of his combat power in reserve; METT-T may dictate a larger or smaller reserve. The reserve must remain hidden until committed. This protects it from enemy attack and enhances the shock effect when it is committed.

In addition to designated reserve forces, the brigade commander immediately reconstitutes a new reserve as

soon as the original reserve is committed. This restores his ability to influence the battle with maneuver forces. Even a small reserve can be decisive in tipping the balance of victory.

The brigade commander uses decision points developed through the IPB process to trigger execution of contingency plans for his reserve. The reserve makes maximum use of the defensive preparation time to rehearse each contingency plan, in priority. Rehearsals are conducted, both day and night, to the lowest level possible. TAIs are developed to support the reserve when it is committed.

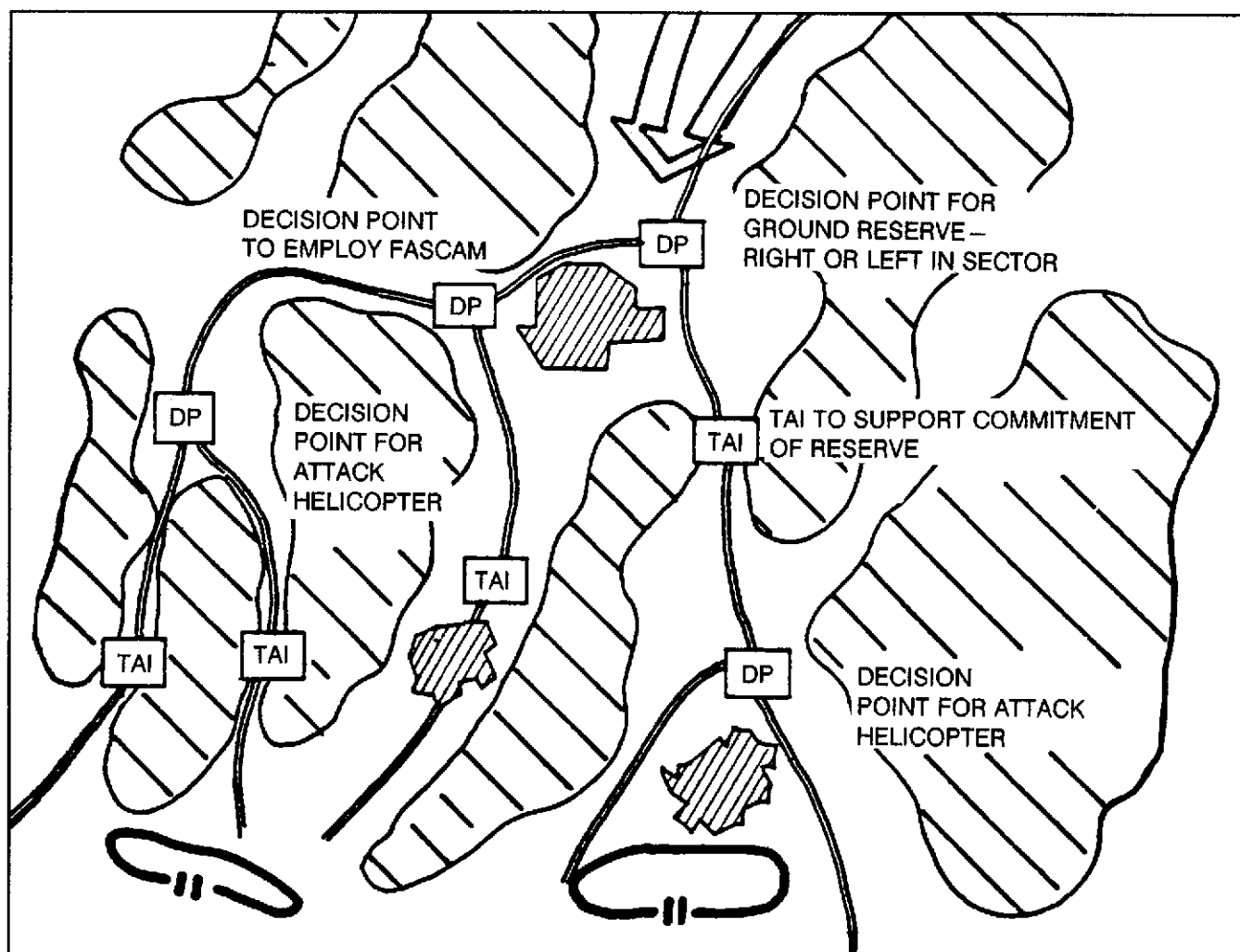


Figure 4-5. Decision Points.

The Reserve and Offensive Action

In planning contingencies for offensive actions of the reserve, the brigade commander considers the enemy situation and estimates the time and distance factors relating to following enemy echelons based on the IPB process. Then he determines which of his units will attack, where they will attack and be positioned after the attack, and what interdiction or deep attack is necessary to isolate the enemy. The commander must also consider the time and distance factors required to focus his combat power at the decisive point to defeat the desired enemy force.

Although he plans for the counterattack, the brigade commander must realize that it is unlikely the action will correspond exactly to expectations. As the situation develops, the commander answers these basic questions:

- Will an attack facilitate the higher commander's intent?
- Is an attack feasible or should the reserve be employed to contain enemy success?
- When and where should the attack be executed?
- In the event of multiple penetrations, which should be attacked and which should be blocked or contained?
- Is the window of opportunity large enough to complete the counterattack before the closure of the next enemy echelon?

The Reserve and the Spoiling Attack

At times, reserves are used in a spoiling attack role to throw the enemy preparations for the attack off stride. Basic considerations for the spoiling attack follow:

- The spoiling attack delays, disrupts, and destroys the enemy's capability to launch its attack or commit a following echelon.
- The objective of the attack is to destroy enemy personnel and equipment, not to secure terrain and other physical objectives.
- Spoiling attacks are not conducted if the loss or destruction of the force jeopardizes the ability of the command to accomplish its defensive mission.

- Mobility of the force available for the spoiling attack should be equal to or exceed that of the enemy force.
- Fire support attacks available enemy reinforcements to ensure the success of the spoiling attack.

Commanders coordinate plans for counterattacks and spoiling attacks using the attack techniques discussed in Chapter 3, *Offensive Operations*. The spoiling attack has many of the characteristics of a hasty attack, a reconnaissance in force, and raid operations.

Reinforcing with the Reserve

In some situations, the brigade commander determines that he cannot counterattack with a reasonable chance of success. He positions the reserve to contain or delay the enemy to gain time for the employment of the reserve of the higher echelon.

The transition from a defensive posture to the offensive is not exclusively the responsibility of the reserve. A variety of tactical situations may offer the opportunity for, or even require, defending units to launch hasty or immediate attacks. Such situations include —

- Breakout from encirclement.
- Relief of encircled forces.
- Raids and spoiling attacks.
- Collapse of enemy resistance or unanticipated enemy withdrawal.

As they plan their battle, the brigade commander and staff consider how reinforcing battalions and companies will be integrated into the defensive scheme. This planning includes placement of battle positions, the routes, and the command and control arrangements. Supporting engineer and MP assets must maintain route trafficability to enable timely movement of the reserve throughout the brigade sector. Positioning and movement of reinforcements are enhanced by designating the routes and providing traffic control personnel and guides at contact points to lead reinforcements and brief them on the situation.

Section VI. SYNCHRONIZATION OF DEFENSIVE OPERATIONS

The brigade commander must integrate and synchronize all CS assets to maximize combat power for the combined arms team. To effectively focus combat power, the brigade commander designates the brigade main effort; this links each subordinate commander's actions to those around him, providing cohesion and synchronization. As the brigade commander develops his battle plan for the employment of maneuver forces, he must visualize how he will synchronize his field artillery, air defense, electronic warfare, NBC, engineer, Army aviation, and CAS assets at the decisive time and place on the battlefield.

INTELLIGENCE

The brigade S2 must focus on IPB in planning for the defense and analyzing the close operation to predict and confirm enemy intentions. Before the battle, the brigade commander requires specific information about—

- The composition, equipment, strengths, and weaknesses of the advancing enemy force.
- The location, direction, and speed of enemy reconnaissance, first echelon battalions, and subordinate companies.
- The location and activities of enemy second and follow-on echelons capable of reinforcing the first echelon.
- Enemy first- and second-echelon regimental C3 facilities.

A detailed reconnaissance, counterreconnaissance, and surveillance plan is prepared by the brigade and battalion S2s and S3s to prevent the enemy from seeing and reporting the strength, composition, and location of the brigade. The reconnaissance, counterreconnaissance, and surveillance plan is vital to early detection and identification of enemy reconnaissance in the security area.

During close, deep, and rear operations, the brigade S2 and supporting intelligence assets aggressively acquire current intelligence to provide the commander with early, accurate intelligence assessments that expedite decision cycles.

AVIATION

Synchronized employment of aviation and ground maneuver forces in the defense begins with coordination between the brigade S3 and the aviation LO in planning the operations.

The inherent speed, agility, and flexibility of aviation elements make them an offensive asset that the brigade can employ to assist in seizing and retaining the initiative. Aviation units under the OPCON of the brigade can conduct attack operations, air assaults, reconnaissance, and security missions in conjunction with ground operations.

As in offensive operations, aviation units that operate with the brigade or in the brigade area must coordinate primary and alternate AAs and FARP locations with the brigade S3.

Logistics support of aviation units remains the responsibility of the aviation brigade; however, forward support aviation logistics operations are coordinated with the FSB in the BSA.

FIRE SUPPORT

The brigade commander weights the main effort by establishing fire support priorities. Close, deep, and counterfires are synchronized with maneuver forces to disrupt and weaken the enemy's offensive action and to provide windows of opportunity for friendly offensive action. The FSCoord uses the IPB process, full integration of intelligence gathering resources, and the target value analysis process to focus fire support on the systems vital to the enemy's success.

Control of fire support assets is centralized for defensive operations. FA and mortars pre-position ammunition and survey firing positions in advance. The FSCoord focuses his planning effort on the following tasks:

- Engaging the enemy early to disrupt the cohesion of its attack and reduce its intelligence gathering capability. As the enemy enters the security area and MBA, fire support will continue to reduce enemy intelligence gathering effort and ability to mass combat power.

- Supporting rear operations.
- Providing deep fires to delay and disrupt following echelons.
- Screening friendly movements.
- Providing counterfire to limit the enemy's ability to shift combat power rapidly.
- Integrating fires with the brigade obstacle plan.

AIR DEFENSE

Depending on the maneuver unit's ability to use defensive positions for cover and concealment and incorporate other passive defensive measures, AD priorities shift toward protection of the covering force, fire support elements, BSA, and C2 facilities. Maneuver units are integrated into the counterair plan by engaging appropriate targets within the capabilities of the weapon systems. Collection and early dissemination of air threat information are required to make this system work. ADA units require engineer support to dig firing positions for heavy ADA systems.

MOBILITY/COUNTERMOBILITY

The priority of engineer effort in the security area is normally given to mobility of the passing units of the covering force, then to countermobility to delay the advance of threat units. Priority for engineer support in the MBA is determined by the brigade commander based on METT-T. A trade-off between countermobility and survivability exists because they both use the same limited earthmoving resources. Obstacles are emplaced in depth to support the maneuver commander's scheme and are integrated into the fire support plan to maximize the effect of friendly fires. Counterattacks may require improvement of mobility corridors to ensure success. Priority of engineer effort in the rear is given to mobility, then to survivability for C3, reserve, and CSS assets.

Defensive operations require intensive management of engineer resources allocated to support the brigade plan. The resources usually consist of a combination of

divisional and corps engineer units. The brigade engineer and the brigade S4 coordinate early to forecast and request the large quantities of required Classes IV and V materials and munitions.

NUCLEAR, BIOLOGICAL, AND CHEMICAL DEFENSE

Throughout the planning process, the brigade commander plans for possible enemy use of NBC weapons and for employment of NBC defense units. All plans and operations of forces and installations are analyzed by the S3 and chemical section to determine their vulnerability to these weapons. The commander specifies the degree of risk he is willing to accept. The brigade chemical section can suggest changes to the concept of the operation if the concept involves unacceptable risks from enemy weapons.

Brigade NBC reconnaissance operations in the defense normally focus on identifying clean areas, battle positions, movement routes, decontamination sites, and contaminated areas that directly affect operations. The information gathered from the reconnaissance effort is immediately passed to higher, lower, and adjacent units and periodically updated.

COMBAT SERVICE SUPPORT

Logistics support to the combined arms team must be coordinated during the planning and execution phases of each defensive operation. The S4 and FSB commander must understand the brigade commander's tactical intent so that service support priorities can be established and logistics operations planned to ensure the supportability of the defense. All CSS activities must look beyond the defense to support opportunities for maneuver units during the transition to the offense.

The brigade S4 identifies all planned logistics requirements to the FSB. The FSB TOC evaluates the supportability of the tactical plan and identifies any shortfalls through a logistics estimate. The brigade commander and S3 use the logistics estimate to evaluate all courses of action.

COMMAND AND CONTROL OF DEFENSIVE OPERATIONS

The brigade commander, with key staff, normally fights the battle from the TAC CP; however, his personal presence may be required at critical points, such as battle hand-over from security forces or commitment of the reserve.

Because C2 facilities are more static than in the offense, emphasis must be placed on locating them in hardened areas or protective terrain and reducing electronic signature. The main CP should be located as far to the rear as possible while maintaining reliable communications with the TAC CP and subordinate battalions. The main CP focuses on monitoring progress of the battle, forwarding information and support requests, and coordinating supporting units.

The rear CP anticipates future support requirements; it coordinates with the FSB commander to ensure continuous logistics support to enable friendly units to regain the offensive. It also focuses on continuity of support for current operations and control of brigade CSS units moving forward from the BSA. The rear CP must continuously monitor the battle and be prepared to immediately assume the role of the main CP, if necessary.

MILITARY POLICE

MP support in the defense provides battlefield circulation control and area security missions. Depending on the MP mission, emphasis should be on MSR regulation enforcement, assistance for security forces' passage, information dissemination, and damage control functions.

COMMUNICATIONS

While the brigade continues to use organic FM communications as the primary means of C2, wire should be used whenever possible. During defensive operations, the hardening of C2 and logistics signal locations becomes more critical because the brigade CPs conduct fewer displacements. If METT-T factors prohibit effective use of wire and messenger, site protection can be improved by using proper signal security measures.

See Figure 4-6 for an example of what defensive synchronization looks like at the brigade level.

<u>OPERATIONS</u>	<u>REAR</u>	<u>CLOSE</u>	<u>DEEP</u>
Intelligence	PIR: Where/When for possible airborne assault into rear area Continuous IPB; Analysis, prediction TF 1-3 listening silence in effect	PIR: Where/When enemy main attack GSRs to TFs MI company team from div (GS) within 10 km of FEBA	PIR: Location 2d echelon
Maneuver (example) Task Force 1-2 Task Force 1-4 Task Force 1-3		OO attacks south into flanks of lead regiment Establishes strong point; Fixes lead regiment	← OO attacks into flanks of 1st or 2d echelon regiments at FEBA →
Aviation	OO responds to rear area threat		OO attacks threat regiment
Fire support	GS/GSR artillery conducts counterfire (Note: All available may be required)	Coordinates/Assumes: Handover from covering force artillery TF 1-4, then TF 1-2, TF 1-3 in order Smoke, FPF allocated for movement of TF	OO SEAD to support helicopter attack EA TOP Priority to strip away threat recon elements via Copperhead, ICM fires ← Target acquisition assets forward to look deep → OO FASCAM to support helicopter attack 2d echelon threat EA TOP
Air defense	Passive AD	← Weapons control status tight →	
	← Weapons control status hold along axis Black upon commitment of ATKHB →	Mixing/Massing throughout MBA Passive AD	

Figure 4-6. Brigade

<u>OPERATIONS</u>	<u>REAR</u>	<u>CLOSE</u>	<u>DEEP</u>
Mobility/Countermobility	Survivability opns	Priority to countermobility, then survivability	Priority to mobility of covering force at BHL OO FASCAM at EA TOP
Nuclear, biological, chemical	Smoke pots Deliberate decon Priorities: Reserve TF 1-3, DS artillery, then FSB in that order	Smoke for deception and movement via vehicles and mechanical smoke NBC scouts recon counterattack route	Projected smoke
Combat support and combat service support	FSB CDR responsible for rear area security in the BSA FSB sustains forward units; Priority to main FSB plans for future offensive opns	Bns treatment teams stabilize casualties Bns evac damaged vehicles to UMCPs MPs assist in battle handover traffic control Bn and co level LOGPAC opns TFs/Units to evac non-repairable weapon systems to FSB Maint support teams from FSB to repair and return damaged equip to user Evac from TF aid station rearward is medical co responsibility Bde S4 feeds tactical situation to FSB	← MP priorities: Battlefield circulation and control and area security →
Command and control	Bde rear CP sustains	Bde TOC assures	Bde TAC CP displaces

Defensive Synchronization.

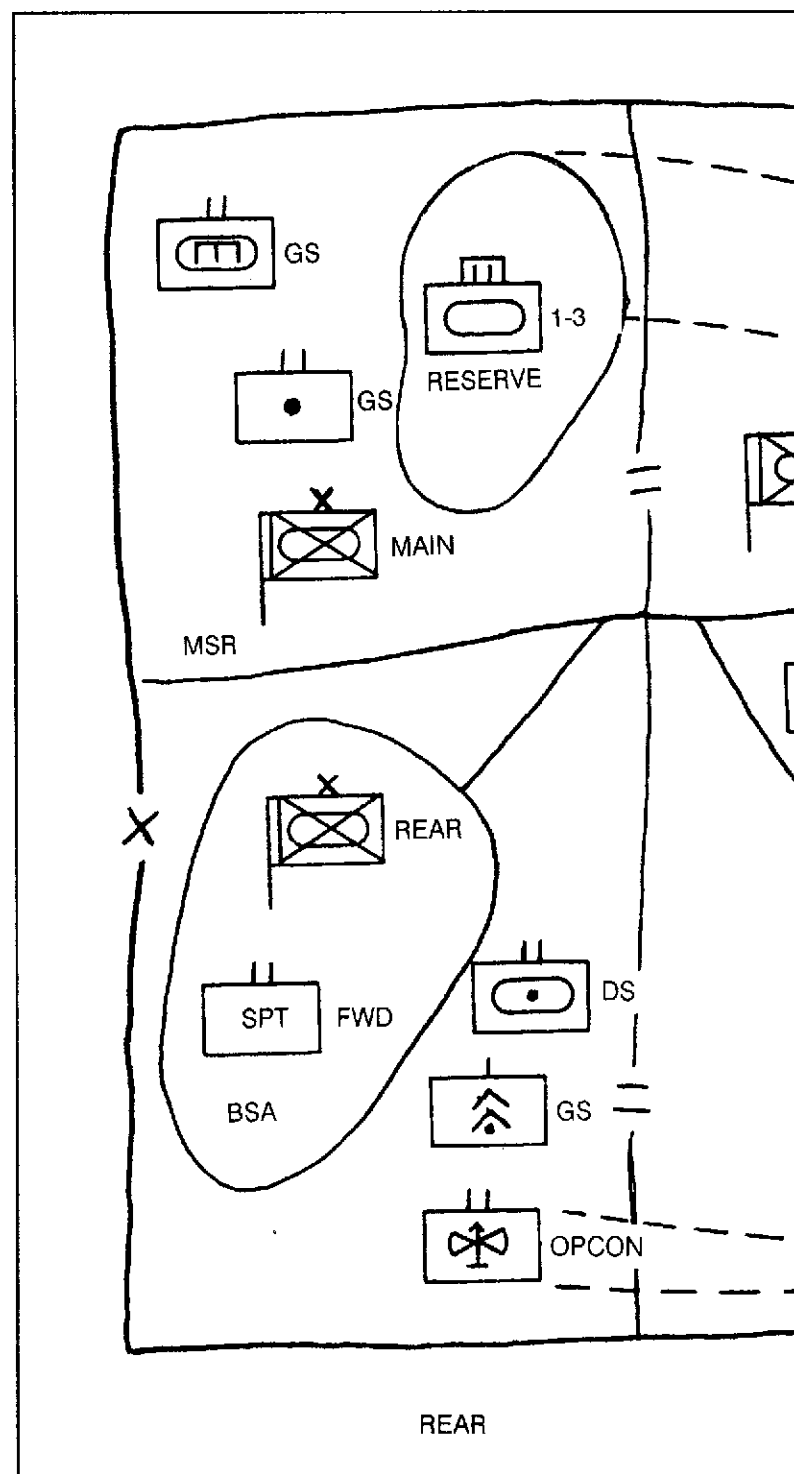


Figure 4-6. Bridge Defense Synchronization (Continued).

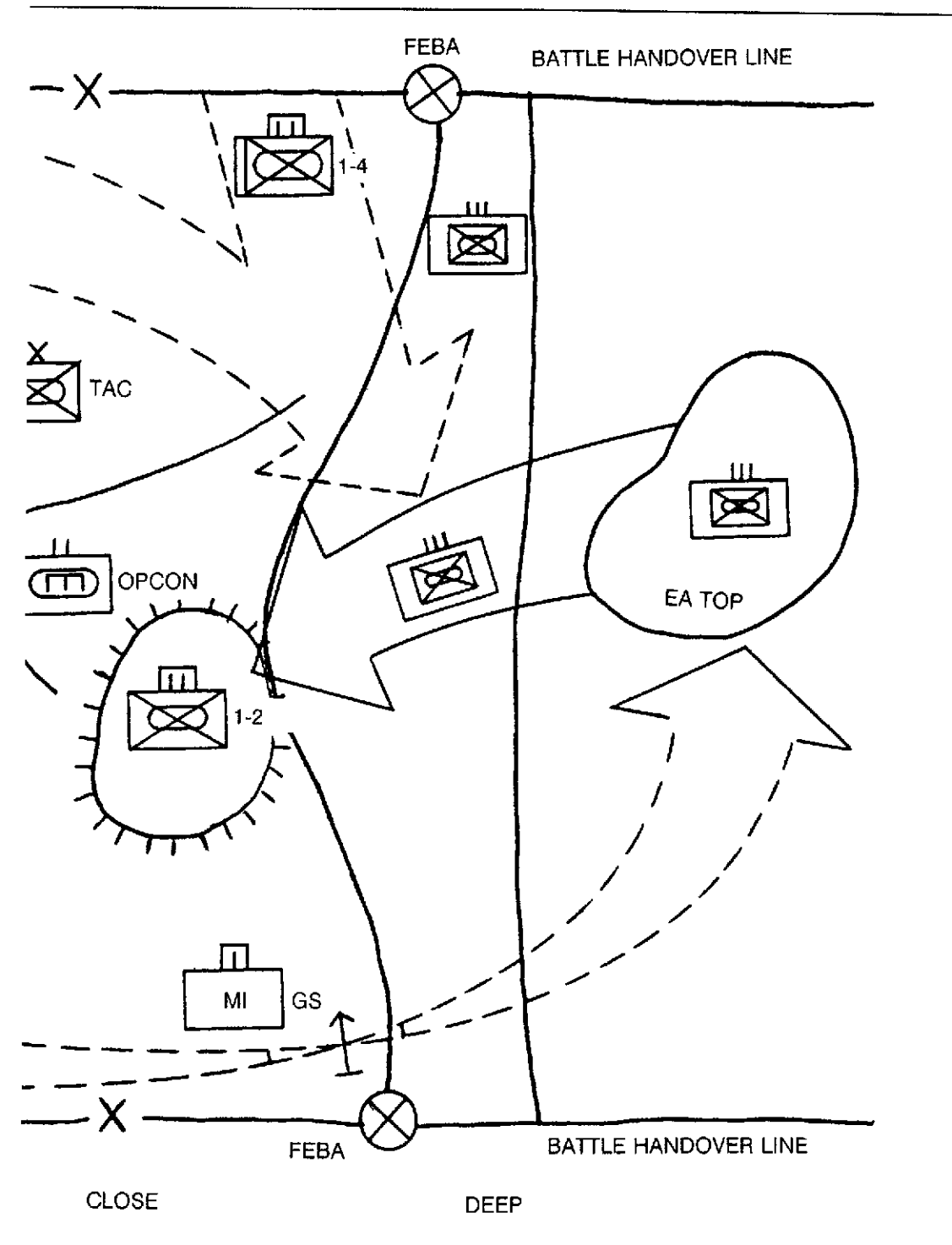


Figure 4-7. Bridge Defense Synchronization (Continued).

Section VII. THE BRIGADE DEFENSIVE BATTLE

COUNTERRECONNAISSANCE

The first part of the defensive battle the brigade must win is counterreconnaissance. Counterreconnaissance is an integral part of the brigade security mission. The focus of the threat's reconnaissance is to confirm or deny the intentions and dispositions of the forces it is attacking. Counterreconnaissance consists of active measures designed to detect, fix, and destroy, as well as passive measures designed to conceal, deceive, and confuse enemy reconnaissance elements. The brigade must integrate these measures into a detailed reconnaissance and surveillance plan designed to prevent the threat from seeing and reporting the strength, composition, and location of the brigade and its obstacles. The brigade's primary focus in counterreconnaissance is in providing and coordinating intelligence and fire support to help TFs identify, fix, and destroy the enemy reconnaissance forces.

During the preparation phase, the brigade S2 and IEWSE continually monitor and track the covering force battle to update the actual threat reconnaissance situation. Specific PIRs are developed and modified to identify, confirm, or deny the expected threat.

The brigade S2 makes recommendations on changes to the task organization required to accomplish the reconnaissance, surveillance, and counterreconnaissance plan. He also coordinates support from attached, DS, and GS assets, such as ground surveillance radar (GSR), collection and jamming platoons, FSB, and FA.

In support of the counterreconnaissance plan, the brigade S3 coordinates the counterreconnaissance effort and issues specific directions to the TFs on which NAIs they must observe. He also lists required patrols, ambush requirements, specific observation posts (OP) locations, GSR sites, and reporting and engagement criteria. This ensures the brigade has an effective, coherent, integrated and synchronized counterreconnaissance effort.

DEEP OPERATIONS

In the defense, deep operations prevent the enemy from concentrating overwhelming combat power by disrupting its momentum and destroying the coherence of

its attack. Effective employment of fire deep attack assets depends on careful planning and IPB. To successfully coordinate operations, the FSO, S3, and S2 coordinate deep operations during all phases of

SECURITY OPERATIONS

The brigade can perform security operations as part of a division or corps defense. Security operations include cover, guard, and counterattack or defend missions. The primary mission is the covering force.

The fundamental purposes of the security operations are to—

- Defeat and destroy enemy reconnaissance forces attempting to penetrate through the security area.
- Force the enemy to deploy and fix the position and strength of the enemy's main body.
- Provide time for the main body to reposition and laterally.
- Shape the battlefield to enable the main body to transition to the MBA fight.
- Destroy enemy forces in the security area within the covering force's capabilities.

To do this, the brigade defends against the enemy's advance guard, force the enemy to delay, and cause the enemy to bring up second-echelon forces to organize and attack the defending enemy. As the enemy shifts its main effort, the brigade security force keeps the actual location of the MB. To do this, the brigade fights forward as long as possible so that MBA preparations are completed. The security area assignment begins along the expected line of initial contact and extends rearward to the battle ha-

re support and EW. The security force must conduct deep operations fully and address the defense.

COVERING FORCE OPERATIONS

The covering force operations as part of the security plan. Security force operations include screen as well as the most comprehensive

The covering force in

reconnaissance forces within the security force

to confirm the direction of the enemy attack toward the

to deploy forward

coordinated transition

security area within the covering force's capabilities and missions.

or delays to strip the enemy of its armor, defeat the advance guard, force the enemy to delay, and cause the enemy to bring up artillery and armor. As the enemy shifts its main effort, it reveals its intentions. The security force also seeks to keep the enemy away from the MBA. The security force must be prepared to be reinforced by higher headquarters. The line of initial contact and the BHL.

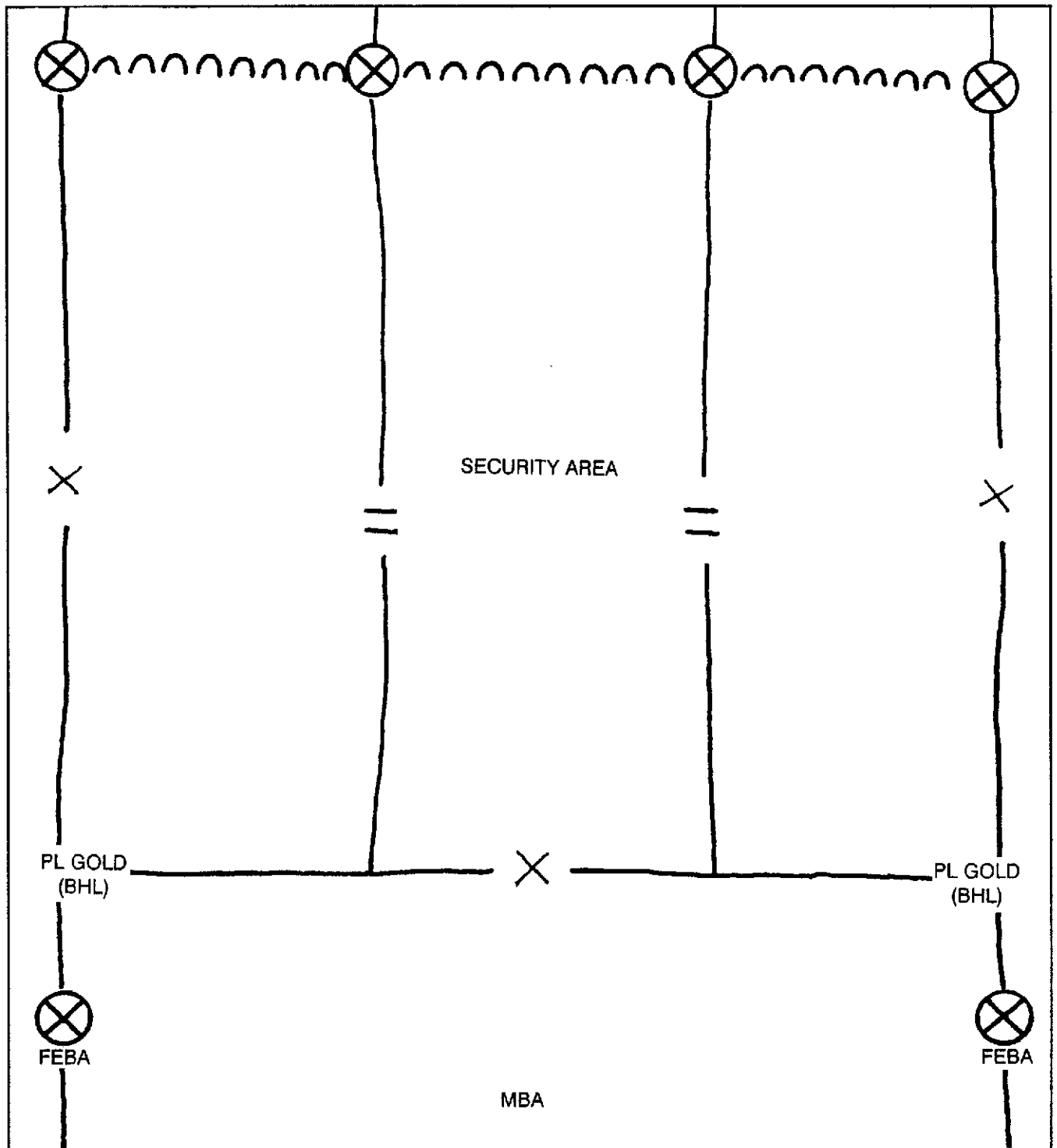


Figure 4-7. Security Area.

The brigade takes up the security force fight from a series of coordinated, mutually supporting battle positions or sectors. When directed to do so, the brigade hands over the battle to MBA forces, then moves to a designated area and prepares for further operations there. Normally, brigade AA is well to the rear but in the MBA. There the brigade can rearm, refuel, and reorganize and prepare to reenter the fight.

Control of the Security Force

The level of command used for controlling security forces generally depends on the width and depth of the security force area, the commander's ability to communicate with subordinate units, the availability of control headquarters, and the number of battalion-size units operating in the security force area. The security force is normally controlled either by the division or by the corps.

Security Force Operations

The size and composition of the security force depends on the commander's estimate of the situation as influenced by the factors of METT-T. The security force is normally tank heavy. A brigade acting as the security force of a division may consist of up to four tank-heavy battalion task forces with attached cavalry, attack helicopter, FA, AD, intelligence, and engineer units. Additional CAS may be allocated to augment the combat power of maneuver forces found in the security area. MBA FA units are positioned forward to support the security area.

When the brigade is assigned a security force mission, subordinate units accomplish their missions as determined by the brigade commander. Because security is provided by giving MBA forces time to react

and room to maneuver, depth of the security force area influences the allocation of forces and missions. As time versus distance requirements are compared, more forces are allocated to the security force or more distance is provided in the security force area. As a rule, the minimum defensive security force area should be at least 20 km in depth to force the enemy to commit combat support forces before its attack into the MBA. Enemy repositioning of artillery and air defense artillery provides the essential indicators of the main efforts.

The higher commander's overall plan should call for a security force to orient on an enemy force rather than a specific time requirement. When the security force area is relatively shallow, the force may only be able to provide early warning of the main attack and strip away the enemy's reconnaissance.

Unobserved, urbanized, or forested terrain is an avenue of enemy movement unless the security force is provided with forces and vehicles to cover such approaches. Enemy offensive doctrine relies heavily on extensive reconnaissance efforts slipping through the defending security echelons. The security force must prevent that infiltration.

The entire security force is not necessarily withdrawn automatically when the first enemy units reach the MBA. A staggered withdrawal improves the chances for overall success. Even if portions of the security force have withdrawn on some avenues of approach, remaining security force elements continue to fight and maintain surveillance well forward of the MBA. This disrupts the enemy's coordination and reconnaissance efforts. A staggered withdrawal of the security force can facilitate counterattacks forward of the FEBA by providing observation of and access to exposed flanks of penetrating enemy forces. In some cases, the security force can be used to attack first-echelon forces in the rear, or it can be committed between echelons to isolate leading enemy units. Depending on the enemy air defense situation, attack helicopters provide excellent daylight counterattack reserves for the security force.

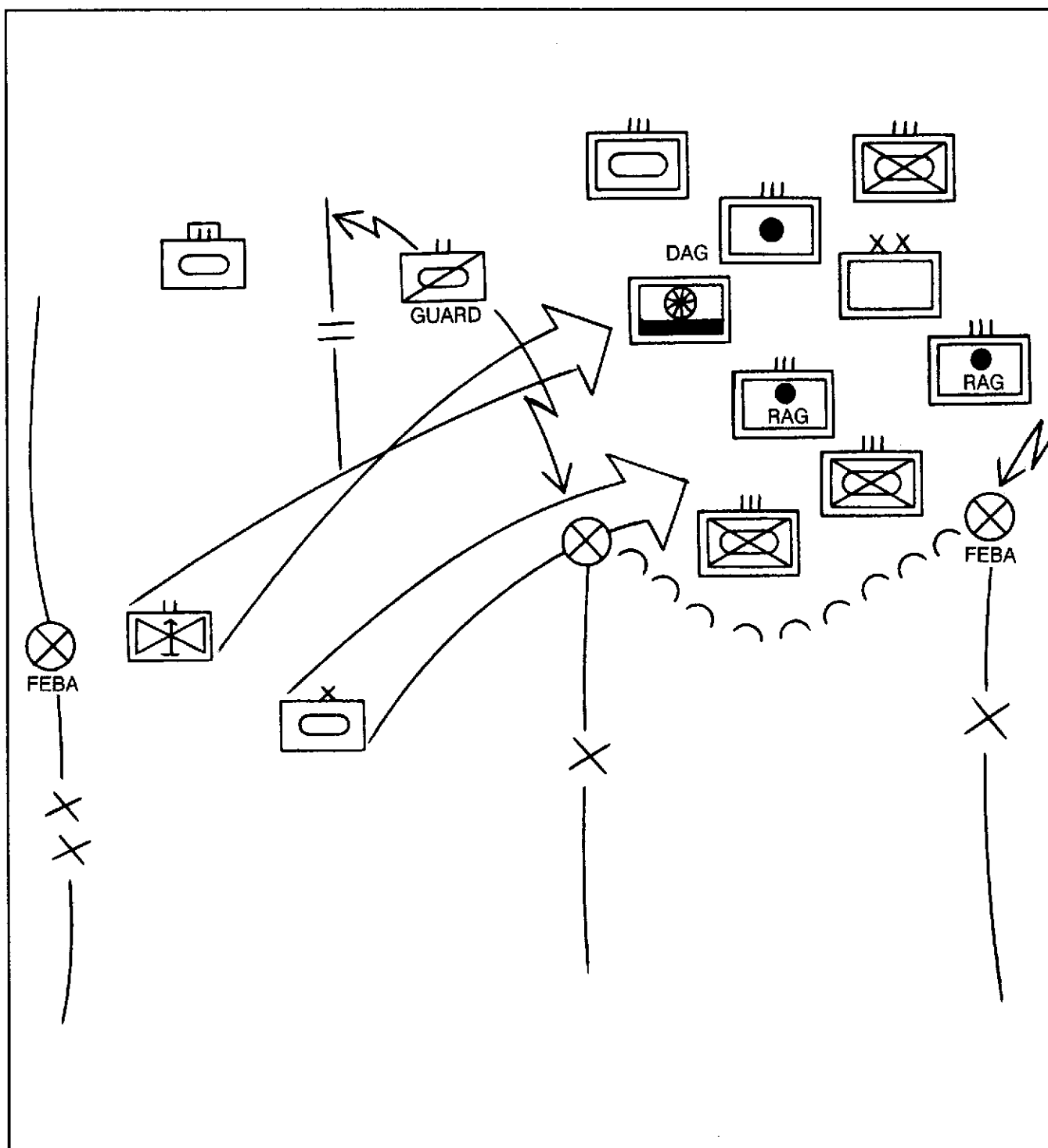


Figure 4-8. Counterattack in Front of FEBA.

Combat power brought against enemy forces within the security area aids the defense of the MBA by destroying the enemy force's combined arms integrity and damaging its ability to react once it arrives in the MBA. Fire support tasks in the security area focus on deceiving the enemy about the location of the MBA and disrupting the enemy's center of gravity before it enters the MBA. Fire support assists in the defeat of the enemy by forcing it to commit forces in a piecemeal maneuver and without key functional elements. This is done by—

- Isolating attacking units with deep fires to limit the enemy's ability to mass combat forces.
- Isolating attacking units with offensive electronic warfare to prevent the enemy from providing intelligence to follow-on forces and to prevent reinforcement from follow-on forces.
- Destroying accompanying air defense systems of the attacking regiments in the security area. This improves the capability of attack helicopters and USAF aircraft to attack the remaining formation in the MBA. Destruction of the air defense radars located by IEW systems denies the enemy the capability to direct its air defense systems. Destruction of the armored command and reconnaissance vehicles and the accompanying forward observers in the assaulting battalions reduces the enemy's ability to incorporate and coordinate indirect fire with maneuver.
- Destroying engineer assets to reduce mine clearing capability before enemy arrival in the MBA.
- Destroying enemy communications systems, enhancing the EW effort against the remaining radio systems in the MBA.

BATTLE HAND-OVER

MBA brigades assume responsibility for the battle as security forces begin withdrawal of combat elements across the BHL. The higher commander establishes the BHL. The MBA and security force commanders coordinate the exact location of the BHL and recommend changes to the higher commander. The BHL is reflected graphically as a phase line and identified in

the appropriate operation plan (OPLAN), OPORD, or FRAGO. The minimum graphic control measures for a rearward passage of lines must also be depicted. The BHL establishes a boundary between the ground owned by the security force commander and the ground owned by the MBA commander. The majority of MBA forces are normally positioned between the brigade rear boundary and the FEBA. However, the MBA commander controls the ground forward of the FEBA out to the BHL. He can place security forces, obstacles, and fires in this area to canalize the enemy or to facilitate the withdrawal of security force elements. The BHL also marks the location where control of the battle will be passed from the security force to the MBA force. The BHL is typically located 2 km to 4 km forward of the FEBA where MBA forces can bring direct and observed indirect fires to bear on the enemy to facilitate appropriate security force activities (such as disengagement, withdrawal, or passage of lines). Specific passage lanes and other details are coordinated between security force and MBA units. When possible, the boundaries of security force units coincide with those of the MBA brigades. The same considerations apply when the brigade provides and controls its own security forces. (See Chapter 5, *Other Tactical Operations*, and Figure 5-2.)

The security force retains freedom of maneuver before passage through the BHL. The security force passes through the MBA forces as quickly as possible, using multiple passage points. GS and general support reinforcing FA units in the security area pass through the passage points before DS, reinforcing, and attached FA units in the security area. Once the GS and GSR units are in position to support, the remaining FA units pass through the passage points before maneuver forces. After the battle hand-over, FA organization for combat and fire support responsibilities changes to reflect the organization necessary to support the MBA.

When corps controls the security force battle, active coordination and liaison are required to synchronize the efforts of the security force units with the division main battle forces. Because the security forces report directly to the corps, the MBA forces should—

- Monitor security force radio nets to get a picture of the battle.

- Establish and maintain liaison with the security force units forward of MBA positions.
- Collocate TAC CPs during the passage of security force units.

MAIN BATTLE AREA

The battle is almost always decided in the MBA. Options for both opponents become less numerous during engagements in the MBA. Brigades adjust their defensive main effort to defeat the attack based on information received during the security force operations. The defending brigade concentrates the strongest possible forces for decisive action against the enemy main effort and commits them with the greatest possible violence when the enemy acts.

In the MBA, brigades direct and control their fight using direct and indirect fires and maneuver against the assaulting enemy. Air support, EW, attack helicopters, combat engineers, AD weapons, naval gunfire, and the DS and reinforcing artillery units assist maneuver battalions in the destruction of the assault regiments. The division supports the brigade fight by providing combat, CS, and CSS; directs operations involving forward brigades; and commits the division reserve when necessary. Concurrently, the division conducts operations against the follow-on echelons, directs the division engineer obstacle effort, and conducts counterfire operations.

Brigade operations emphasize execution of battalion plans within the context of the overall brigade concept and use of individual initiative pursuant to mission orders. A brigade's main focus of effort is identified; CS assets and other battalion plans are tailored to support this effort.

Brigade and battalion commanders plan and reconnoiter their sectors, counterattack objectives, attack routes, and battle positions in depth throughout their operational areas. Commanders direct the fight by specifying which battle positions or sectors their units will occupy, what units do when they get there (defend, delay, attack, or overwatch), and how fire support will be integrated into the fight at each location.

The brigade defends by confronting the enemy with strong combined arms TFs and battalions positioned in the brigade sector. As the enemy attack moves into the

defended area, its forces are delayed, contained, separated, and attacked. The brigade uses frontal and flanking fires delivered from well-positioned battalion TFs and attack helicopters; ambushes and employment of reserves against the enemy flanks and rear; and

massed fire support. Obstacles are used to slow, canalize, and disrupt the enemy's timetables. Obstacles and fires are critical to fragment enemy mass, degrade trafficability, and confuse enemy command and control by causing the enemy to fight in multiple directions.

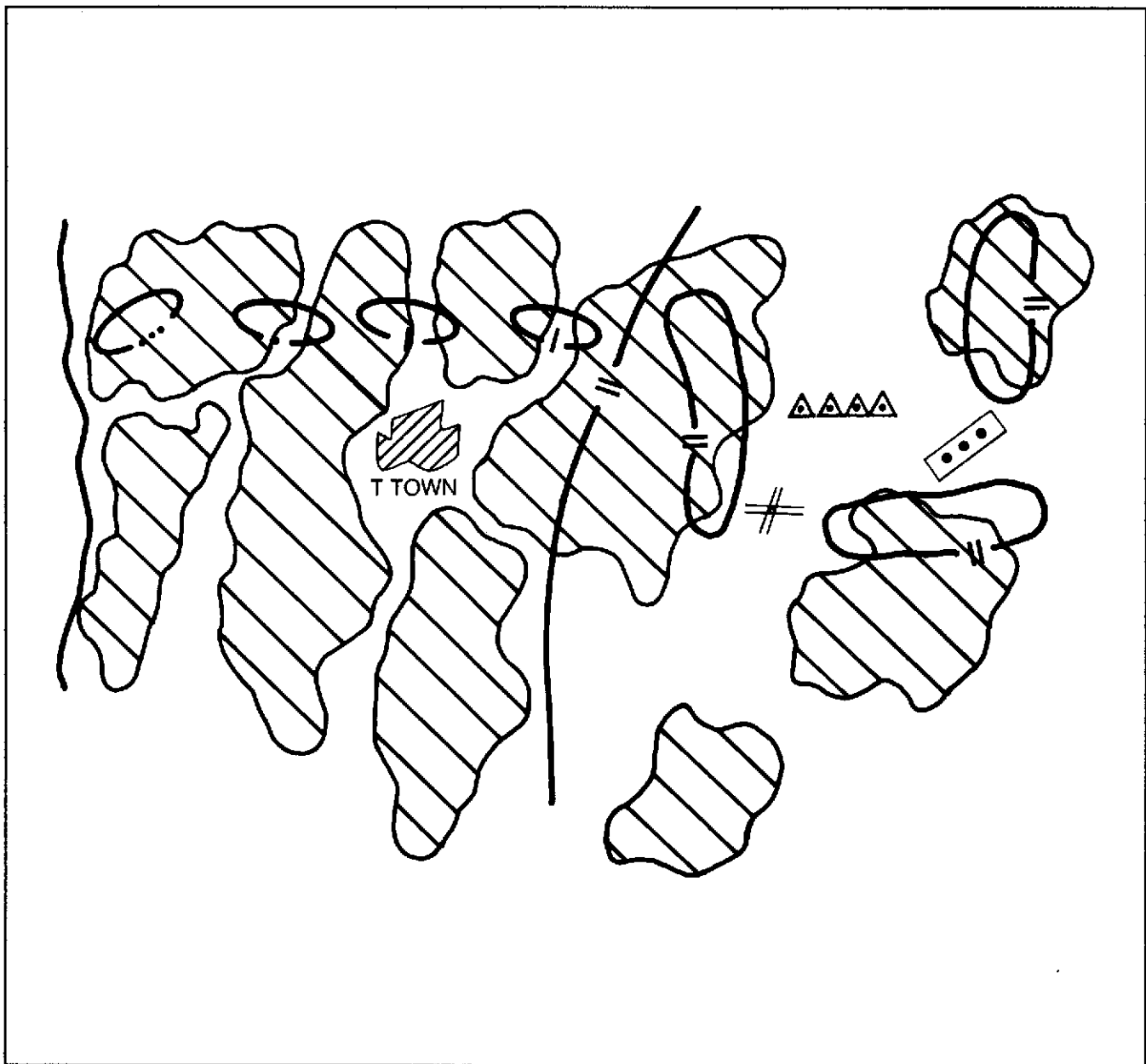


Figure 4-9. Example of Restrictive Terrain Choke Points.

Commanders and planners must recognize the likelihood of penetrations in the MBA. When fighting large, mobile forces, the commander may permit a partial penetration as part of the operational concept, then counterattack the flank and rear of the penetration. If penetration of the MBA or separation from adjacent units occurs, MBA forces continue to fight within the

commander's intent; they protect their own flanks while striking at the enemy's and, when possible, reestablish contact across areas of penetration. The commander rapidly shifts fire support to limit the ability of the enemy commander to capitalize on a penetration. Preparation of counterattack plans are integral to the MBA fight.

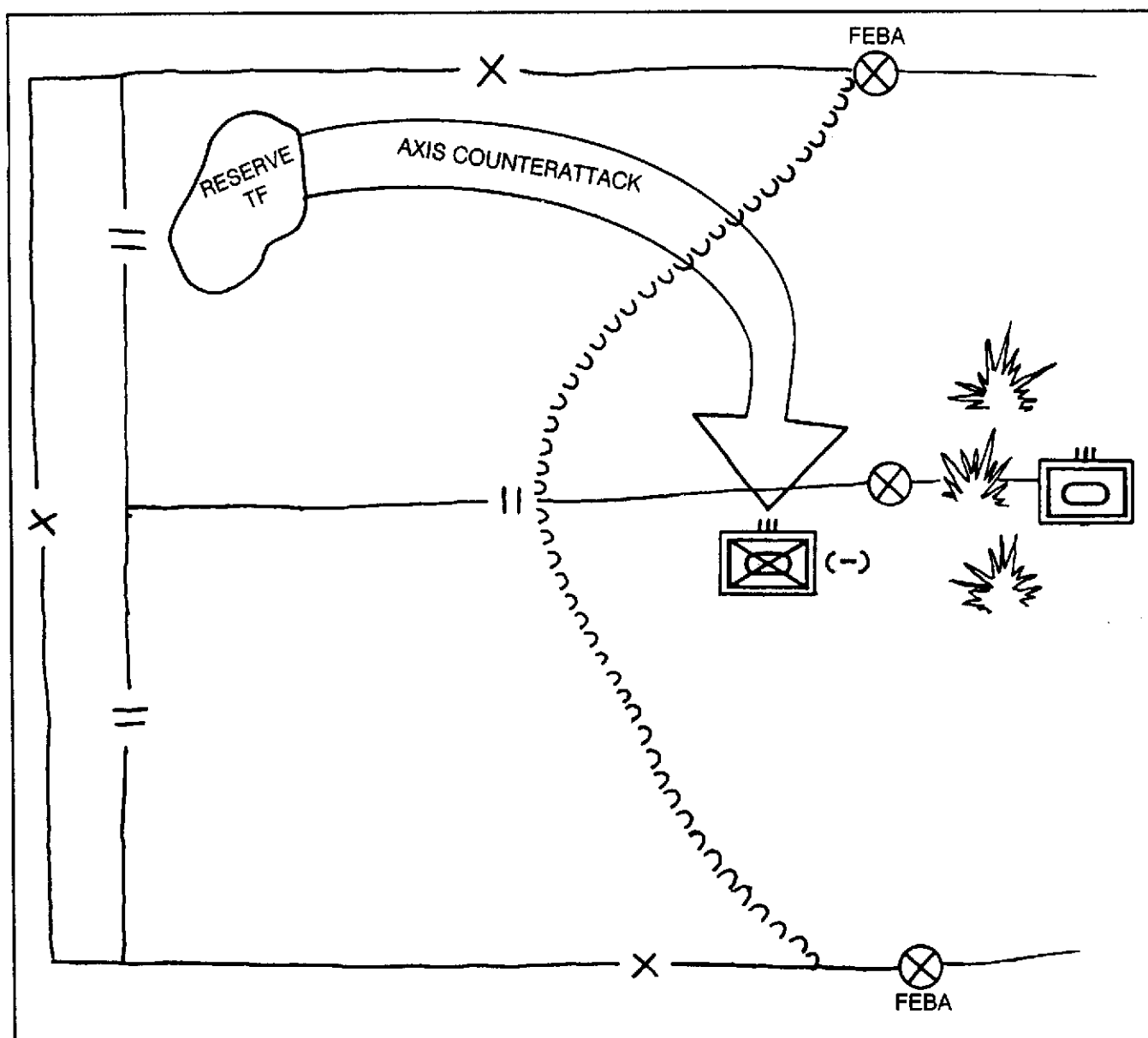


Figure 4-11. Brigade Counterattack into Enemy Penetration.

The defense cannot be strong everywhere and should not attempt to be; the defender must take some risks. This is particularly true when forces are moved to join the reserve in a decisive counterattack against the enemy rear or flank. Less threatened areas are screened by cavalry, attack helicopter units, or battalion TFs. Ground surveillance radars, remote sensors, and obstacles assist in this effort. Contingency plans are developed to counter enemy efforts in these risk areas.

REAR OPERATIONS

The brigade rear area extends from the forward battalion rear boundaries to the brigade rear boundary.

Units in the brigade rear area are responsible to for planning defense against Levels I, II, and III enemy threats. Operations against a Level III rear area threat forces a major change in the brigade's mission. The brigade's higher headquarters must provide the flexibility to deal with a Level III threat or accept the responsibility for brigade rear area defense. Rapid response to a rear area threat, particularly Levels II and III threats, is integral to the commander's ability to sustain a viable defense. Fire support, with its ability to shift on the battlefield faster than other forms of combat power, is key to rear operations.

Section VIII. LIMITED-VISIBILITY OPERATIONS

Aggressive raids and spoiling attacks carried out at night or in limited-visibility conditions can break up enemy attacks and permit the isolation and destruction of smaller enemy formations. Because of the defender's advantage of a detailed knowledge of the terrain, the defender's forces can operate with greater effect at night.

The defender's tactical plans must be simple; his units must train often under limited-visibility conditions. Execution is decentralized with reliance on well-trained small unit leaders confident in their ability to defend during periods of limited visibility. Detailed reconnaissance is conducted during daylight and in periods of reduced visibility to ensure responsive execution of brigade plans. Movement during limited visibility takes longer; this must be considered when displacing units, planning counterattacks, and concentrating fires.

The enemy may attempt to gain surprise by using nonilluminated attacks. Defending forces adjust their dispositions and increase patrolling at night or in limited visibility.

Threat forces routinely continue attacks into the night to sustain momentum. If its hasty attack is stopped, the threat may move to a deliberate attack. Threat forces use artificial illumination, such as flares, searchlights, and infrared equipment. With passive and thermal night-vision equipment, the defender has a significant advantage.

Threat dependence on limited-range, infrared night-driving equipment results in slower movement and permits acquisition by friendly night-vision devices. Adjustment of artificial illumination causes maneuvering forces to pause. Either way, defenders have more time to react, concentrate, and engage.

The Threat's active infrared equipment is effective up to about 900 meters. Use of smoke by the defender can render enemy passive and active infrared night-vision devices virtually useless at ranges under 900 meters. Thermal-equipped defenders can identify and engage targets far beyond this range. Defenders can move and engage in relative security beyond the range at which they can be seen. Smoke is therefore planned for all-night or limited-visibility operations.

This chapter implements STANAGs 2355 and 2868.

CHAPTER 5

OTHER TACTICAL OPERATIONS

Other tactical operations encompass a wide range of special purpose operations undertaken routinely during offensive and defensive operations. While not

the main focus, these other tactical operations must be synchronized.

Section I. RELIEF IN PLACE

When tactical operations continue over a prolonged period of time, a relief of committed units may be required. In a relief in place, a deployed brigade is replaced by another which assumes the missions and the assigned sector or zone of action of the outgoing brigade. Relief operations may be conducted during either offensive or defensive operations. Relief in place operations may serve one or both of the following purposes:

- To relieve a depleted unit in contact with the enemy.
- To relieve the stress of prolonged operations. An adverse weather or NBC environment increases the need for relief.

The basic considerations for a relief in place operation are —

- Units are normally relieved at night or during periods of reduced visibility.
- CPs are collocated.
- Detailed prior reconnaissance by the incoming unit is essential.
- The incoming unit must fit into and accept the general defense plan of the outgoing unit until completion of the relief.
- To preserve secrecy during the relief, normal patterns of activity in a defense sector should be maintained.

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- CS and CSS units normally should not be relieved at the same time as the units they support.

When a unit relieves another unit in place, the warning order to the incoming unit must specify, as a minimum, the time for commencing and completing the relief and the priorities for use of routes involved. The two brigades conducting the relief coordinate procedures for accomplishing the following items.

EXCHANGE OF PLANS AND LIAISON PERSONNEL

The incoming brigade commander and staff must be briefed and become thoroughly familiar with the existing defensive plans. The outgoing brigade leaves liaison personnel with the incoming brigade. These personnel usually remain until the incoming units become familiar with the situation.

SEQUENCE OF RELIEF

The relief in place is executed by stages, either rear to front or front to rear. In determining the sequence of the relief, both commanders should consider —

- The subsequent mission of the brigade conducting the relief.
- The strength and combat efficiency of the brigade presently in place.
- The capability of the enemy to detect and react against the relief.
- The characteristics of the area of operations.

PASSAGE OF COMMAND

The time or circumstances under which the incoming commander assumes responsibility for the area must be clearly established. During the relief, the outgoing commander retains responsibility for the area and mission and exercises operational control over all subordinate elements of the incoming brigade that have completed their portion of the relief. Responsibility passes to the incoming commander when all the battalions in the forward defense area have been relieved and adequate communications have been established.

RECONNAISSANCE

Commanders and staff officers of all echelons of the incoming brigade conduct a thorough daylight reconnaissance.

SECURITY

All echelons of the incoming and outgoing units must prevent the enemy from learning that a relief is taking place. In addition to conducting the relief during periods of reduced visibility, the following security measures should be taken:

- Restrictions on the size of advance parties and reconnaissance parties must be enforced.
- Communications during the relief are conducted on the command frequency of the outgoing unit until the relief is complete.

MOVEMENT CONTROL

Arrangements between the incoming and outgoing brigades must be made for the control of units moving into and out of the area. Coordination must include —

- Routes to be used and priorities for their use.
- Responsibility for traffic control.
- Location of AAs.
- Provision of guides for incoming units.

CONCURRENT PLANNING

Both brigades issue OPORDs directing the conduct of the relief according to procedures agreed upon between the two units. Before OPORDs are issued, warning orders are disseminated to subordinate units to allow concurrent planning.

INTELLIGENCE

The outgoing brigade transfers to the incoming brigade all information and intelligence concerning the enemy and the area of operations.

AIR DEFENSE ARTILLERY

In addition to conducting the relief of AD assets in sector, a primary mission of ADA units is to provide increased coverage over all primary relief routes in sector. These tasks are accomplished jointly, and actual relief of ADA units is not scheduled until the relief of all maneuver units has been accomplished.

FIRE SUPPORT

The fire support units of the outgoing brigade remain in position until the units in the forward defense have been relieved. Target lists and fire plans are exchanged at all echelons.

ENGINEERS

Exchange of target folders, status of obstacles, emplacement of conventional and scatterable minefields, and reports of enemy minefield emplacement must be accomplished.

EXECUTION OF RELIEF

A relief in place is executed in stages. Reserves are relieved first, followed by relief of forward elements. When minimum forces are employed on the FLOT, the relief is conducted from rear to front. When maximum forces are employed on the FLOT, the relief is conducted from front to rear.

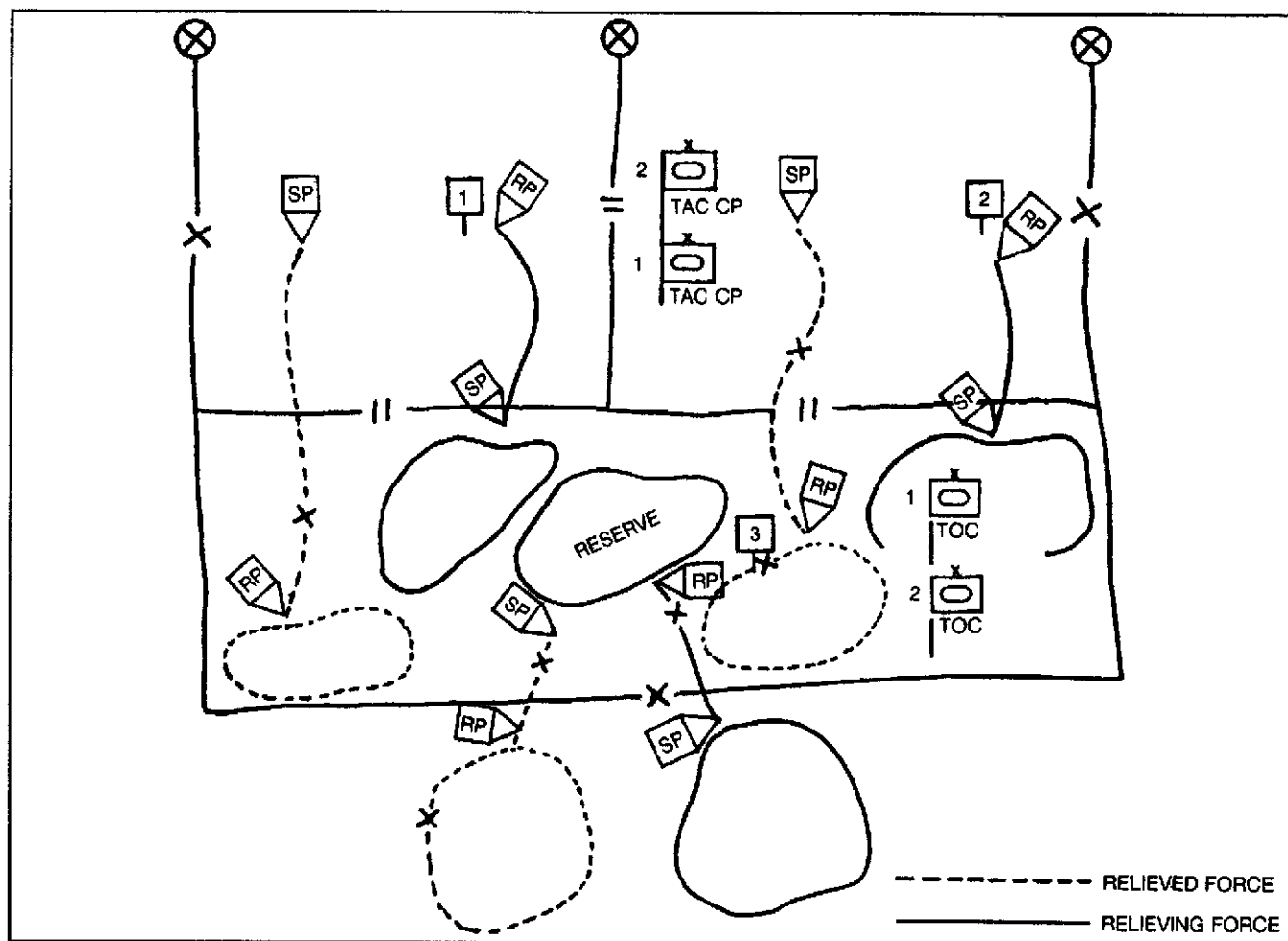


Figure 5-1. Graphic Control Measures for Relief in Place.

Section II. PASSAGE OF LINES

The coordinated movement of one or more units through another unit is a passage of lines. A brigade passage of lines is a complex operation requiring detailed coordination, extensive planning, and close supervision between brigades.

Passages of lines are either forward or rearward. They are conducted to—

- Continue an attack or counterattack.
- Envelop an enemy force.
- Pursue a fleeing enemy.
- Withdraw a security or MBA force.

BASIC CONSIDERATIONS

The division or corps commander is responsible for planning and coordinating a brigade passage of lines. Certain basic considerations must be integrated into the planning process:

- Plans for the conduct of the passage must facilitate transition to the subsequent missions of both the passing and stationary brigades.
- Responsibility for control of the zone or sector passes from one brigade to the other at a time and place directed by the higher common commander or mutually agreed upon by the stationary and passing brigade commanders.
- The passing brigade uses multiple routes through the passed brigade and avoids the use of AAs. It does not halt within the passed brigade's forward positions.
- Deception and smoke are planned at dummy and actual unit locations and passage points.
- CS and CSS assets of the stationary brigade are integrated into the plan to support the movement of the passing force.
- Stringent graphic control measures are established to ensure a smooth passage.

COMMAND AND CONTROL

Brigades collocate TAC CPs to facilitate a smooth passage and transfer of the responsibility of zone or sector. An order of movement, setting priorities on which units move and when they move, precludes confusion and congestion. The brigades conducting the passage of lines coordinate and pass down to battalions—

- Exchange of intelligence, tactical plans, and recognition signals.
- Exchange of SOPs.
- Arrangements of reconnaissance by elements of the passing battalions.
- Security measures during the passage.
- Selection of passage areas and provisions for guides.
- Priorities for use of routes and facilities and provisions for movement control. The passing unit must have priority.
- Time or circumstances when responsibility for the control of the area of operations will be transferred.
- Fire support and other CS to be provided by the stationary unit.
- CSS to be provided by the stationary unit.
- Exchange of liaison personnel.
- Collection and exchange of information on friendly minefields and other obstacles.
- Command and support relationship between incoming CS and CSS units and facilities and the stationary unit in whose area they may plan to locate.
- Measures to minimize vulnerability to enemy nuclear, biological, or chemical munitions.
- Tactical cover and deception plans to retain secrecy and to aid in gaining surprise.

Battalions also conduct detailed follow-up coordination with passed units.

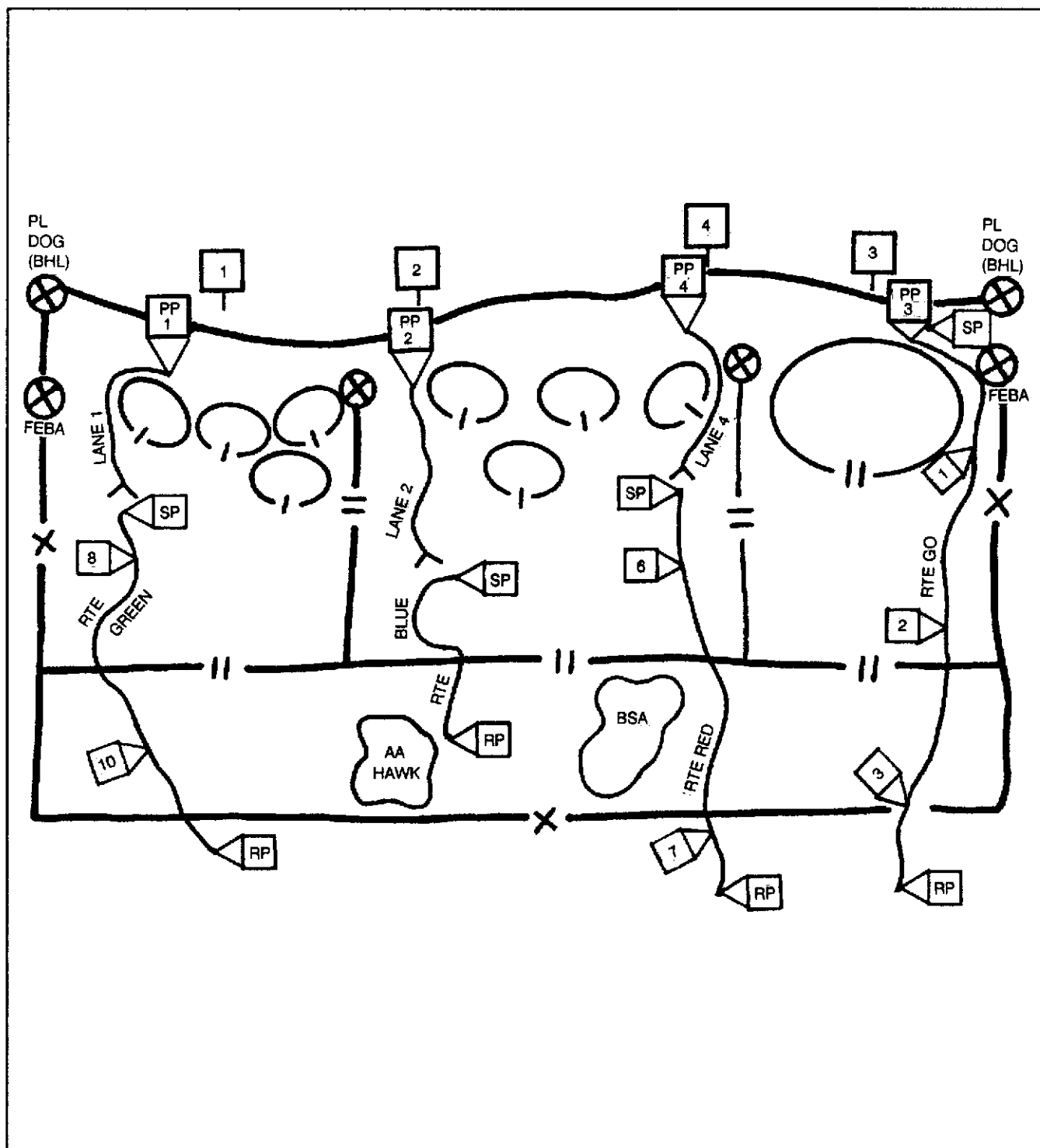


Figure 5-2. Graphic Control Measures for Rearward Passage of Lines.

If both the passing and stationary brigades are assigned to his division, the division commander directs the placement of the contact points. The stationary brigade commander confirms the location of the contact points with the passing brigade to ensure they facilitate passage and do not disrupt his defense. Detailed coordination by subordinate battalions executing the passage is conducted at their respective contact points.

The BHL is the critical control measure for the conduct of a rearward passage and smooth exchange of battle responsibility. It is a phase line where the stationary force assumes control of the battle once withdrawal of the passing unit begins. The BHL is dictated by division and is sited to permit the stationary force the ability to engage the enemy and assist the rearward passage of the security force elements. The MBA commander may position forces and obstacles in this area to assist the withdrawing security force.

The passing brigade must have priority on clearly identified routes through the stationary brigade's rear area. When possible, routes dedicated for the passing brigade use should be different from stationary brigade supply routes to avoid congestion and confusion. These

routes must extend to the passing brigade's final destination. All unnecessary passing brigade assets (field trains, reserves, selected combat trains elements) must withdraw as early as possible to reduce friendly troop density in the passage area. The passing brigade must ensure the transfer of target folders and obstacle coordination with the stationary force to include closing of gaps in obstacles, if applicable. Stationary brigade fire support and ADA assets provide support to the passing brigade.

The stationary brigade also provides CSS assistance to the passing force, including vehicle recovery, medical evacuation, and emergency repair and refuel of equipment.

FORWARD PASSAGE OF LINES

A forward passage of lines occurs when one brigade passes through another and attacks. The brigade in contact remains in place and supports the passing brigade by fire until its fires are masked. The planning procedures for a forward passage of lines are similar to those of the rearward passage.

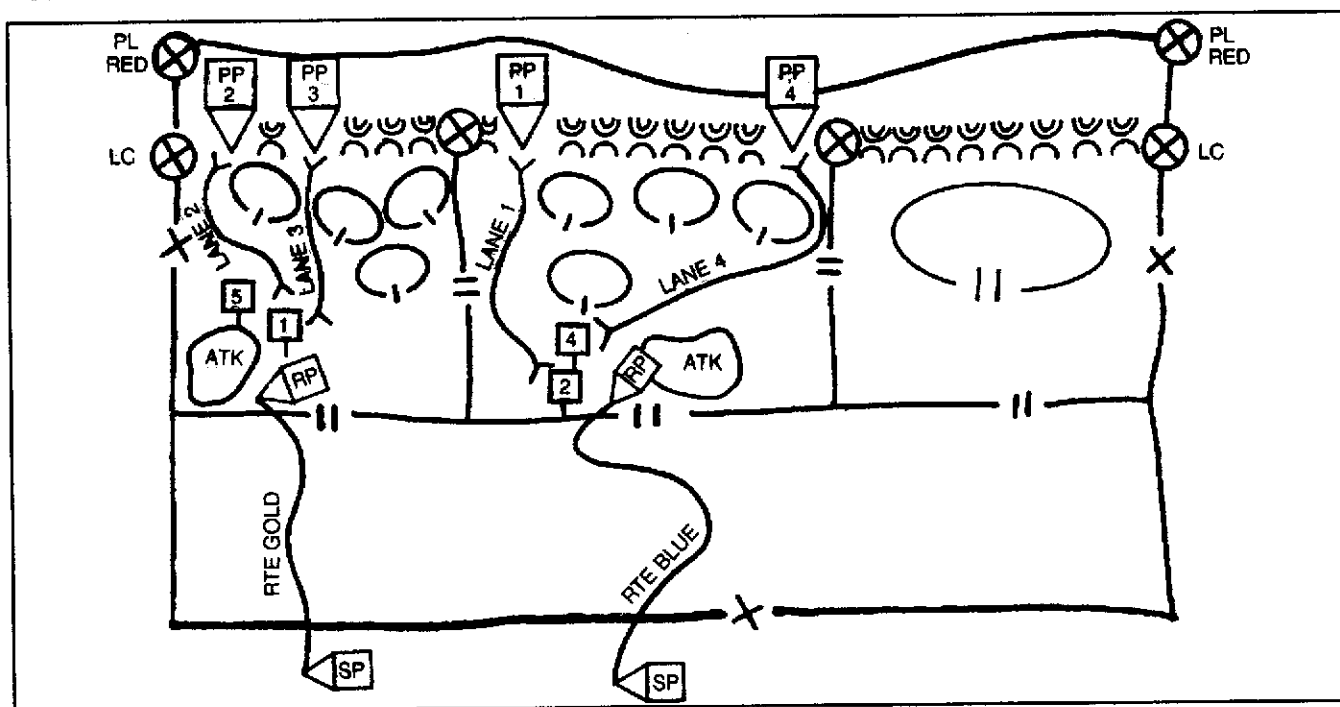


Figure 5-3. Graphic Control Measures for Forward Passage of Lines.

It is the higher common commander's responsibility to establish the contact point, passage lanes, and passage points to support the scheme of maneuver.

The stationary brigade engineer must pass all information concerning emplacement, turnover, execution, and breaching of all obstacles in sector. Additional

engineer support from the stationary brigade may be required for opening gaps and providing guides to the attacking forces through obstacles along the FLOT.

Until transfer of responsibility of the zone has occurred, all indirect-fire missions are coordinated and approved by the stationary brigade FSO.

Section III. BREAKOUT OF ENCIRCLED FORCES

A brigade is encircled when all ground routes of evacuation and reinforcement have been cut by enemy action. A force ordered to remain in a strong position on key terrain to deny the enemy passage through a vital choke point following an enemy breakthrough or left to hold the shoulder of a penetration may become encircled. A unit might also be left in position behind the enemy by design or given a mission with a high risk of being encircled. When this happens, it is vital that the encircled commander have a clear understanding of the higher commander's plan so the unit can continue to contribute to the mission.

COMMAND ACTIONS

The senior maneuver commander within the encirclement assumes control of all forces. He informs his superior of the situation; simultaneously, he begins to accomplish the following tasks regardless of his subsequent mission:

- Reestablish a chain of command. Fragmented units are reorganized, and a clear chain of command is established. Personnel not essential to CS and CSS are organized for combat operations or provided to battalion as replacements.
- Establish a viable defense. The command quickly establishes all-around defense; assigns sectors, battle positions, or strongpoints; and institutes an aggressive patrolling plan.
- Establish a reserve. A reserve must be constituted and positioned to take advantage of interior lines. Consider establishing more than one reserve.

- Organize fire support. All indirect-fire assets in the encirclement is reorganized and brought under centralized control of the FSCoord. Artillery and mortars are distributed throughout the pocket to limit their vulnerability to counterfire. The available fire support from outside the encirclement is coordinated by the FSCoord.
- Reorganize logistics. An early assessment is made of the logistics posture of the encircled command. Temporarily, all CSS comes under the centralized control of the senior logistician or designated individual. He rations key supplies, authorizes cannibalization, identifies equipment to be destroyed, and develops a casualty evacuation and stay-behind plan.
- Maintain morale. Commanders and leaders at all levels maintain the confidence of soldiers by resolute action and a positive attitude. They keep soldiers informed to suppress rumors.

ACTIONS UPON ENCIRCLEMENT

The options available to the encircled brigade are—

- Conduct a breakout attack in the direction of a friendly force.
- Defend encircled.
- Attack deeper toward enemy forces and installations.
- Exfiltrate from the encircled position toward friendly forces.

The decision on which option the brigade should take is based on the intent or orders of the division commander. Regardless of the mission, contingency planning for a breakout should begin immediately.

Breakout Toward Friendly Forces

An attack in the direction of friendly forces is used when linkup is necessary and time is crucial. If a breakout attack is used, it is important that it take place as soon after encirclement as possible; the enemy force may not realize that it has encircled a brigade. The longer the commander waits to conduct the attack, the more organized the enemy forces are likely to be.

The attack to break out of an encirclement differs from other attacks only in that a simultaneous defense in other areas of the perimeter is maintained. To achieve a breakout, the commander accomplishes the following tasks:

- Organize the forces for the breakout.
- Deceive the enemy as to time and place of the breakout attack.
- Exploit gaps or weaknesses in the encircling force.
- Exploit darkness and limited visibility.
- Concentrate combat power at the breakout point.
- Coordinate with supporting attacks.

The forces for breakout are organized into five distinct tactical groups:

- Rupture force. The rupture force attacks, creates a gap in the enemy's weak point, if known, and holds the shoulders for the remaining forces to pass through.
- Reserve force. The reserve force follows the rupture attack to maintain attack momentum and to secure objectives past the rupture. After the rupture force secures the gap, the reserve force normally becomes the brigade's lead element.
- Main body. The main body contains the CP elements, casualties, CS, and CSS elements; it moves as a single group. It usually follows the reserve through the gap created by the rupture force. One commander should be given C2 of this element to ensure orderly movement.

- Rear guard. The rear guard consists of the personnel and equipment left on the perimeter to provide protection for the rupture and diversionary attacks, if a diversionary attack force exists.
- Diversionary force. Attention must be diverted from the location of the rupture by a show of force elsewhere. Mobile weapon systems and tanks are ideally suited for the diversionary force. The diversionary attack should be directed at a point where the enemy might expect a breakout.

Defense While Encircled

Encircled forces may be required to maintain their positions and defend in place. Encircled forces defend if they are tying up sufficient enemy forces to weaken the enemy's main attack. This decision is based on METT-T and the higher commander's intent.

Attack of Deeper Enemy Forces and Installations

Units temporarily encircled may continue attacks to their objective if the encircling enemy force cannot contain the encircled force and the encircled force can sustain the attack. An attack deeper into the enemy is used to disrupt, disorganize, and destroy enemy forces. Objectives for the attack should be C2 facilities, logistics centers, and other CSS assets.

Exfiltration

If success of a breakout attack appears questionable and a relief operation is not possible, an organized exfiltration is required. Exfiltration may be considered when the brigade needs to link up with the division, but time is not a crucial consideration. An exfiltration effort can distract the enemy from its main effort and produce intelligence for the main force. Exfiltration is usually a last resort for an encircled force.

Section IV. LINKUP OPERATIONS

Linkup operations are conducted to join two friendly forces. Linkup operations are conducted to—

- Complete the encirclement of an enemy force.
- Assist breakout of an encircled friendly force.

- Join an attacking force with a force inserted in the enemy's rear.

Normally, heavy brigades are employed as a linkup force especially where there is a requirement for overwhelming mobility and firepower to break through enemy forces, to capitalize on an airborne insertion, or to relieve a surrounding force. The brigade may conduct a linkup operation separately or as part of a division operation. The following are considerations for planning a linkup operation:

- Command relationship and responsibilities. The headquarters directing the linkup must establish the command relationships and responsibilities of the forces involved.
- Command and staff liaison. Liaison is established during planning and continues throughout the operation.

- Communication. The communications plan includes the channels for radio communication and recognition signals between the two forces.

LINKUP OF A MOVING FORCE WITH A STATIONARY FORCE

In an operation where one force is moving to link up with a stationary force, the following planning procedures are necessary:

- Coordination of ground linkup points. Linkup points are coordinated at locations where the axis of advance of the linkup force intersect the security elements of the stationary force.
- Fire coordination. For linkup operations, a restrictive fire line (RFL) is required to preclude fires from the converging forces from falling on each other.

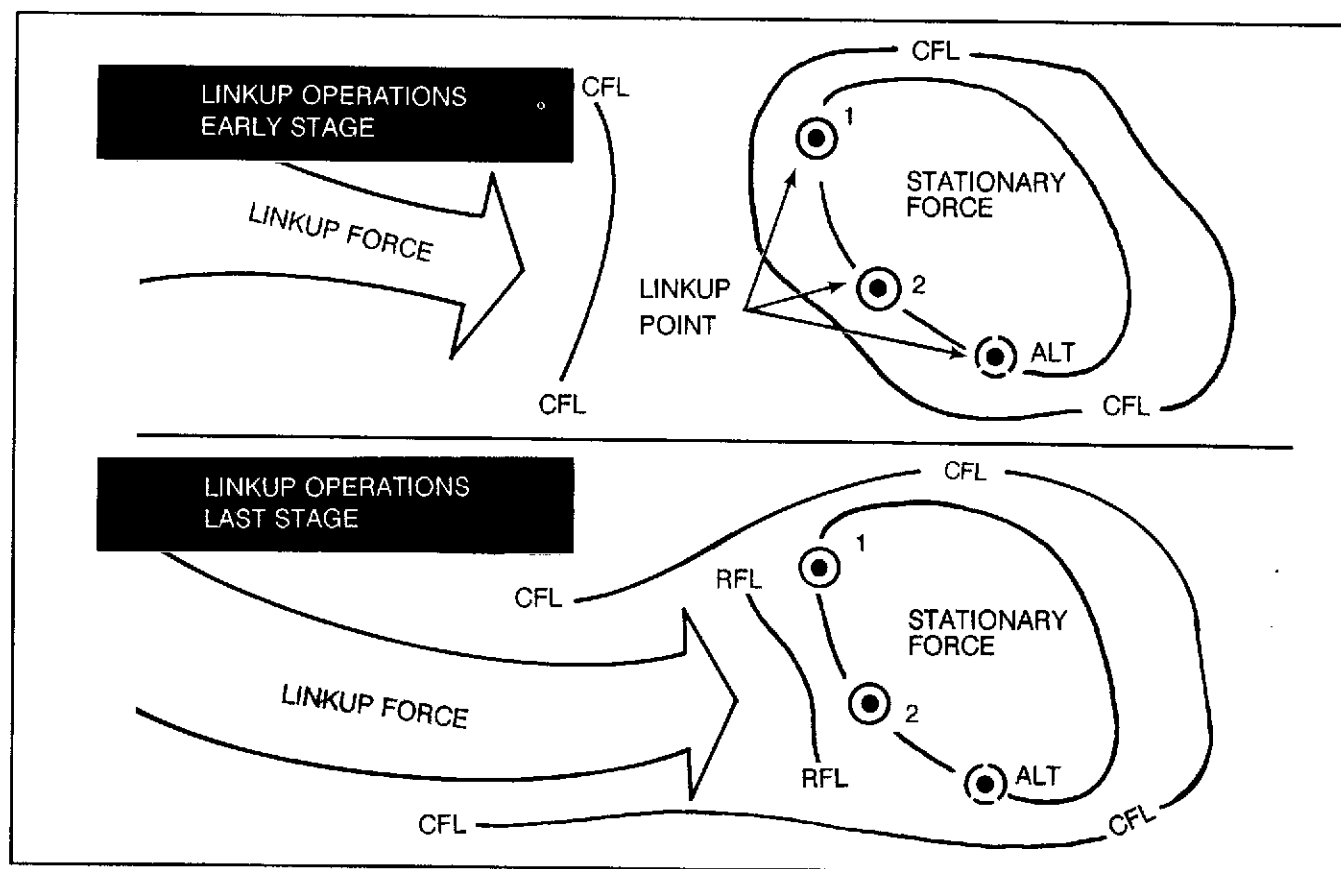


Figure 5-4. Fire Coordination Measure, Moving/Stationary Linkup.

- Air defense artillery considerations. The brigade A2C2 element (S3 air) must ensure timely dissemination of information and coordination so that ADA units do not engage friendly aircraft that may be supporting the linkup units.
- Actions following linkup. When the linkup is made, the linkup force may join the stationary force or may pass through or around and continue the attack. If the linkup force is to continue operations with the stationary force, a single commander for the overall force is designated.

LINKUP OF TWO MOVING UNITS

Linkup between two moving units is one of the most difficult operations and is normally conducted to complete the encirclement of an enemy force. Primary and alternate linkup points for the moving forces are established on boundaries where the two forces are expected to converge. As linking units move close to one another, the need for positive control to avoid

firing on one another must be coordinated to ensure the enemy does not escape between the two forces. Leading elements of each force should monitor a common radio net.

Considerations for fire coordination, AD coordination, and actions following linkup of moving forces are identical to those discussed above for stationary linkup.

LOGISTICS

Logistics support is more complex in linkup operations than those for other actions. Additional considerations for planning logistics support in linkup operations include the distance to the objective area, the amount of time the objective area is to be held, planned operations or movement out of the objective area, resupply of the stationary unit, and movement of the land tails of the airborne or air assault units. Another consideration is whether brigade lines of communication will be secured by follow-on units.

Section V. BRIGADE SYNCHRONIZATION OF RIVER CROSSINGS

Brigades conduct river crossings as part of the division or corps scheme of maneuver. When the brigade commander receives the mission to conduct a river crossing, he begins planning to synchronize the full range of his combined arms assets. His objective is to project his combat power to the far side of the river quickly so as to maintain the brigade's momentum. The brigade commander does not surrender the initiative to the enemy by letting water obstacles needlessly affect his scheme of maneuver. Whenever possible, brigades cross all obstacles, including rivers, in stride, using local materials and organic assets.

There are three types of river crossings: hasty, deliberate, and retrograde. A hasty crossing is a decentralized operation using expedient means and materials. A deliberate crossing requires more detailed planning and coordination, a buildup of firepower and equipment, and centralized C2. The retrograde crossing is centrally planned because of limitations on existing bridging, the increased danger from advancing enemy forces, and the requirement to reestablish the defense

beyond the water obstacles. Synchronization of river crossing entails special considerations for each operating system.

COMMAND AND CONTROL

Plans for a river crossing are developed at division. Division then resources the brigade according to METT-T and the division main effort. Initial planning requires that brigade provide a crossing area commander. This normally is the brigade XO and a small staff attached to the division crossing force headquarters to ensure synchronization of all organic and supporting combat multipliers. The brigade commander is the assault force commander.

INTELLIGENCE

The S2, through the IPB process, focuses intelligence gathering mechanisms on obtaining information about the water obstacle, water conditions, surrounding terrain, and enemy dispositions. A river crossing concentrates forces and thereby causes friendly forces to be vulnerable at the crossing points. The S2 should obtain detailed information on specific enemy capabilities that

can attack this vulnerability, such as air support, nuclear and chemical capability, and indirect fire support.

FIRE SUPPORT

Fire support assets are positioned to provide indirect fires and smoke on the near and far banks and support the bridgehead. Fire support assets must be included in the initial crossing to provide continuity of support and maintain momentum.

AIR DEFENSE

Air defense considerations are the same as fire support. It is critical to the success of the river crossing operation that AD assets be postured to provide complete protection to the river crossing sites before, during, and after the crossing operation.

ENGINEER OPERATIONS

The commander must position engineer assets well forward during the advance to the obstacle. This facilitates a rapid crossing and maintains the momentum. Assaulting units include engineers to reduce enemy obstacle and develop exit points on the far bank.

NUCLEAR, CHEMICAL, AND BIOLOGICAL

River crossings present a lucrative target for nuclear and chemical fires. Brigade NBC assets must be prepared to conduct rapid decontamination of critical crossing areas. Smoke is planned to conceal preparations for the crossing and the crossing itself and to assist in the deception plan.

COMBAT SERVICE SUPPORT

River crossings require that CSS assets be positioned to support the operations for the maximum time without displacement after the crossing is initiated. Support must be continuous to maintain momentum.

MANEUVER

Maneuver brigades plan for mech-heavy forces to make the initial assault and secure the exit bank. Tank-heavy forces provide direct overwatching fires and follow the initial assault force. Combat support forces accompany assault forces, develop crossing sites, emplace crossing means, control participating units, and assist assault forces to the objectives.

Aviation units provide a unique capability to support crossing operations. They are used to transport assault forces and equipment, provide fire support, transport supplies, and obtain intelligence.

Section VI. RETROGRADE OPERATIONS

A retrograde operation is an organized movement to the rear or away from the enemy. The operation may be forced by enemy action, or it may be executed voluntarily. In either case, it must be approved by the higher commander.

TYPES OF RETROGRADE OPERATIONS

Retrograde operations are classified as delays, withdrawals, and retirements. All three could be going on simultaneously.

- **Delay.** A force in contact trades space for time, inflicting maximum punishment on the enemy without becoming decisively engaged.

- **Withdrawal.** A force in contact disengages from the enemy either unassisted or assisted by another force.
- **Retirement.** A force not in contact moves away from the enemy in an organized manner.

Retrograde movements are conducted for one or more of the following purposes:

- To harass and delay the enemy.
- To draw the enemy into an unfavorable position or trap.
- To permit the employment of all or a portion of the command elsewhere.

- To avoid combat under undesirable conditions.
- To gain time and avoid fighting a decisive engagement.
- To disengage from battle.
- To conform to movements of other friendly troops.
- To shorten lines of communications.
- To clear zones for friendly use of chemical or nuclear weapons.

CONTROL MEASURES

Control measures for a delaying action can include designated delay positions, sectors, and routes of movement.

Control measures prescribed for a withdrawal are based on the situations under which the withdrawal is expected to occur. When the withdrawal is conducted during periods of reduced visibility with a probability of enemy pressure, highly restrictive control measures are essential. If conducted during daylight under enemy pressure, control measures are generally limited to those prescribed for a delaying action.

Control measures for a retirement include routes of movement, PLs, and traffic control points.

FIRE SUPPORT

Fire support assets assist in the destruction of enemy forces. These initially provide long-range fires on advancing formations to—

- Force early deployment.
- Slow and degrade the effectiveness of armored vehicles by forcing them to button up.
- Suppress and destroy overwatching enemy air defense weapons and artillery command posts.
- Deliver FASCAM to complement and reinforce engineer obstacles.
- Deliver smoke to cover movement of displacing friendly units.
- Mass fires to support the extrication of threatened or isolated units.

OTHER SUPPORTING TASKS

Effective AD coverage must be maintained. Protection of units in choke points is especially critical.

Attack helicopters are used for counterattacks or assisting the disengagement of ground maneuver units.

In retrograde operations, the engineer priority is on mobility operations, although the majority of effort could be expended on countermobility operations, especially in a delay or during withdrawal under enemy pressure.

Engineers are employed to—

- Prepare and execute point obstacle targets in choke points.
- Emplace hasty minefields, cut expedient tank ditches, and emplace other antiarmor obstacles to block enemy high-speed avenues of approach and canalize them into choke points.
- Conduct mobility tasks including improvement of covered and concealed routes between battle positions.
- Assist maneuver units in preparing fighting positions.

Planning for CSS requires early displacement of unneeded support assets to reduce traffic congestion. Combat service support operations are characterized by rapid deployments, complicated maintenance and recovery problems, and high fuel consumption.

DELAY

A delaying action is an operation in which maximum delay and damage are inflicted on an advancing enemy without the delaying force becoming decisively engaged in combat. A brigade may conduct a delay as part of—

- Covering forces for defending or withdrawing main bodies.
- The advance guard or covering force when encountering superior forces.
- An economy-of-force operation conducted to fix or contain an enemy attack on a less critical avenue of approach.
- A deception measure to set up a counterattack.

As a delaying force, the brigade must —

- Provide the required period of delay.
- Preserve the integrity of the battlefield by always maintaining contact with the enemy.
- Cause the enemy to plan and conduct successive attacks.
- Preserve the force, making sure the delay mission is accomplished. A portion of the brigade may be required to accept decisive engagement in order to accomplish the delay mission.

A delay is different from the defense in that it is not necessarily intended to achieve complete destruction of the enemy; decisive engagement is to be avoided if the required delay can be achieved otherwise. A delaying action is characterized by operations on a wide front with maximum forces in contact and minimum in reserve. A delay is more difficult than a defend mission. For these reasons, there are key considerations that must be applied when executing a delay:

- Centralized control and decentralized action. A delay results in a series of independent unit actions across the front in which each commander must be permitted freedom of action in engaging the enemy within the context of the commander's intent. In the conduct of the delay, the unit must maintain enemy contact and closely coordinate flank security.
- Maximum use of terrain. Delay positions should be located on terrain features that control the likely avenues of enemy approach.
- Forcing the enemy to deploy and maneuver. Engagement at maximum ranges of all weapons causes the enemy to take time-consuming measures to deploy, develop the situation, and maneuver to drive the delaying force from its position. An aggressive enemy commander will not deploy if he correctly determines that friendly forces are delaying; he simply uses his mass and momentum to develop sufficient pressure to cause friendly forces to fall back. Therefore, the delay must be sufficiently tenacious to leave him in doubt about the friendly mission. When the enemy commander believes he has encountered the main friendly defenses, he will then deploy.

- **Maximum use of obstacles.** Reinforcing and existing obstacles are used to canalize and slow enemy forward progress and provide security to the flanks of the delaying force.
- **Maintaining contact with the enemy.** Continuous reconnaissance is conducted to establish and maintain contact with the enemy to prevent any attempt to bypass or envelop the flanks or penetrate between brigade units conducting the delay.
- **Avoiding decisive engagement.** The delaying force

normally displaces to the next delaying position before becoming decisively engaged. If units conducting the delay become decisively engaged, they may jeopardize the entire operation. It is not possible to delay successfully against an aggressive opponent unless the friendly force possesses a mobility advantage.

A delay mission may take one of two forms: delay in sector or delay forward of a specified line or position for a specified time. Figures 5-5 and 5-6 depict brigade delay missions.

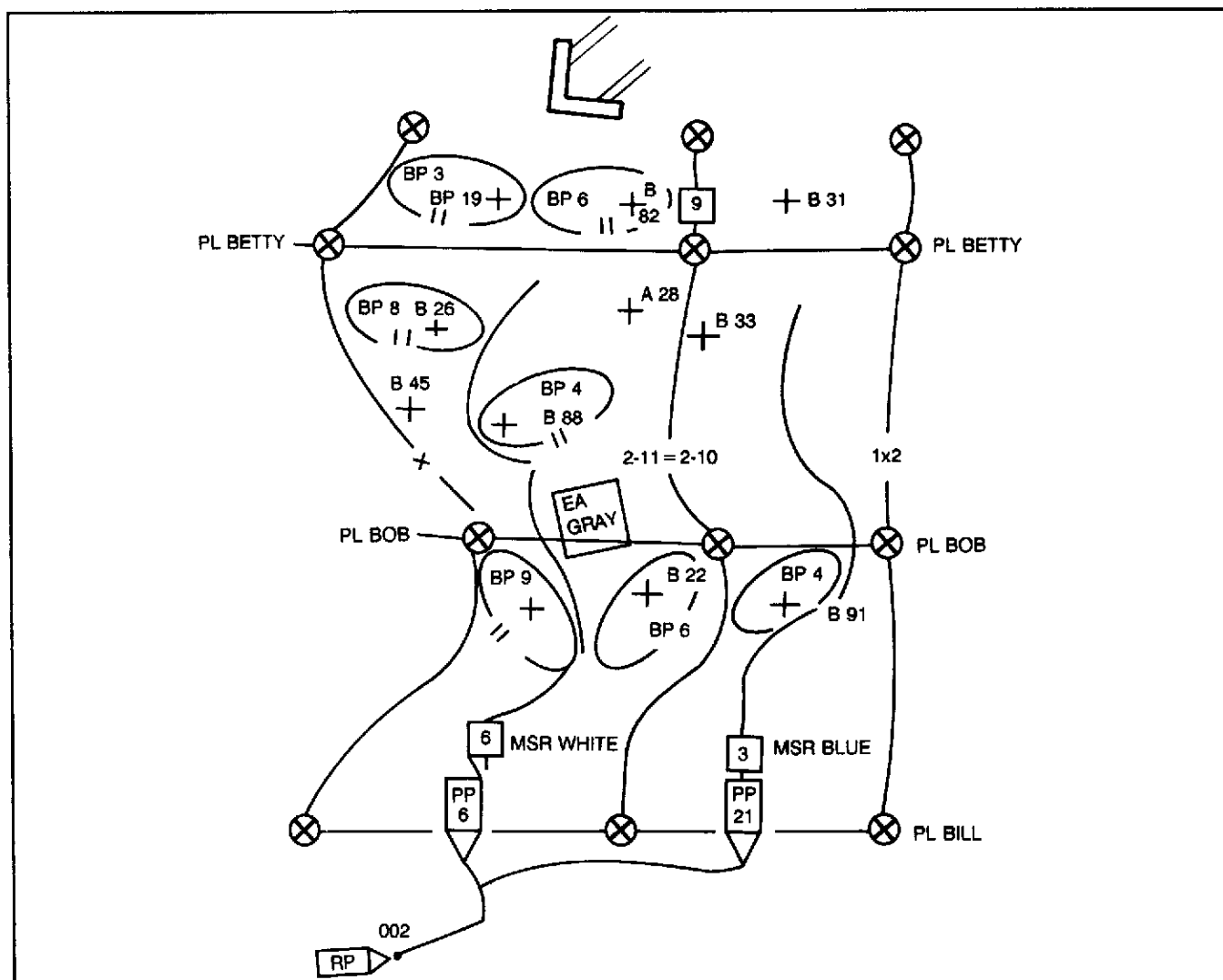


Figure 5-5. Delay in Sector.

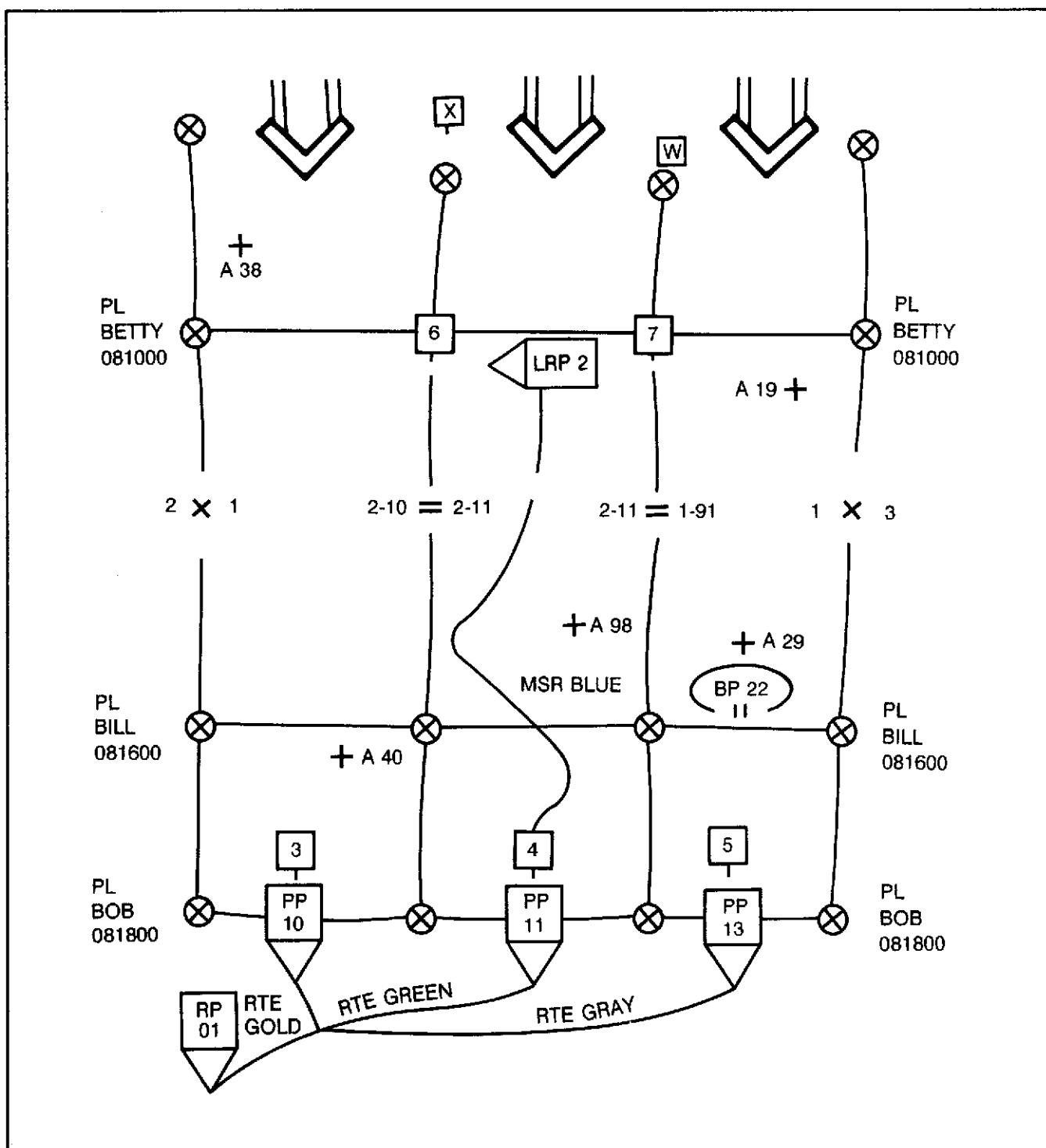


Figure 5-6. Delay in Sector (Forward of a Specified Line for a Specified Time).

Brigades accomplish delaying missions by assigning areas of operation to subordinate battalions. Battalions accomplish their delay missions by delaying on successive positions, by delaying on alternate positions, or through a combination of the two techniques.

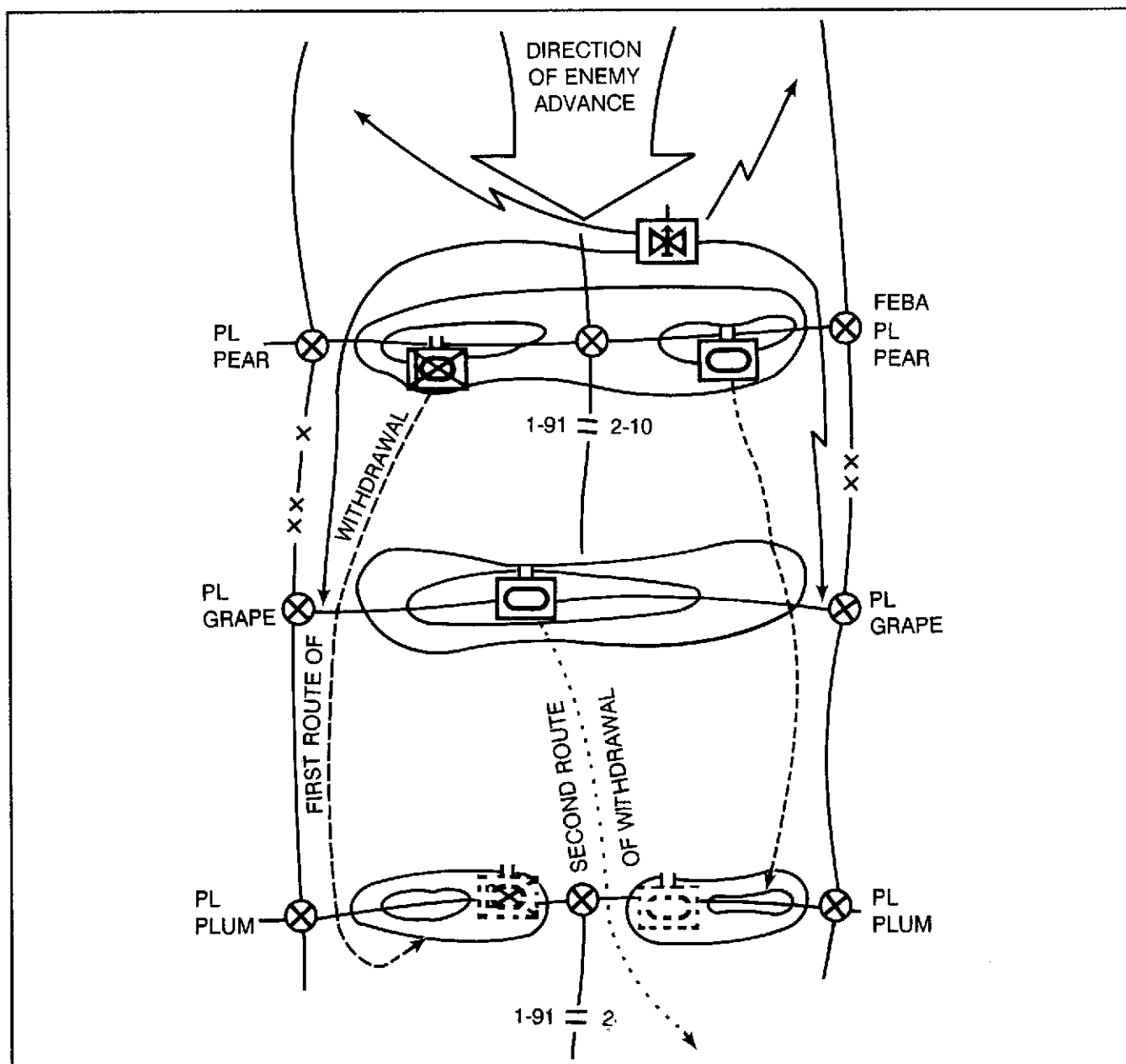


Figure 5-7. Delaying Action, Alternate Positions.

WITHDRAWAL

During withdrawal, all or a portion of the brigade disengages from the enemy and moves away in an organized manner. Withdrawals are either assisted or unassisted. An assisted withdrawal uses a security force provided by the next higher headquarters to assist the brigade in breaking contact with the enemy and to provide overwatching fires. In an unassisted withdrawal, the brigades provide their own security covering force. Withdrawals may or may not occur under enemy pressure.

Withdrawal operations are conducted in several phases:

- Initiation of security force operations.
- Selection, reconnaissance, and necessary preparation of multiple routes, traffic control points, and on-order AAs.
- Preparation of obstacles to hinder the pursuit by the enemy.
- Evacuation of wounded, recoverable equipment, and supplies and movement of nonessential CSS units to the rear.
- Positioning of security forces.
- Preparation of deception operations.
- Deployment rearward of FA units not needed to support the withdrawing forces.
- Disengagement and movement of the withdrawing main body to new positions.
- Disengagement and withdrawal of security forces or security elements when directed to do so by the brigade commander.

Assisted Withdrawal

The assisting force occupies battle positions to the rear of the withdrawing brigade and prepares its defense. Detailed coordination is conducted with the withdrawing brigade, which then delays to the BHL, conducts a passage of lines, and moves to its final destination.

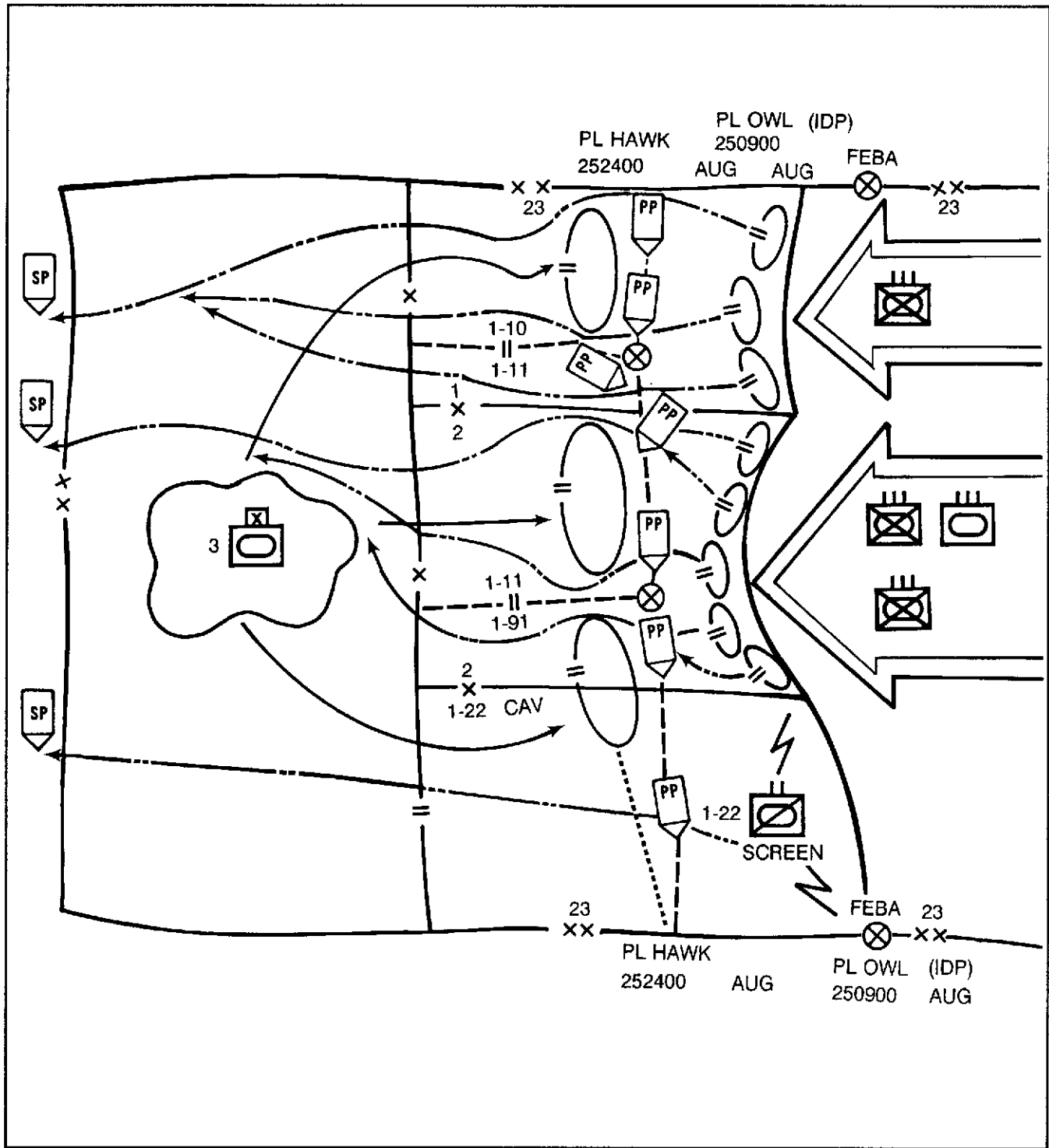


Figure 5-8. Brigade-Assisted Withdrawal.

Unassisted Withdrawal

The brigade can establish a security force for the whole brigade. Usually this is at least a battalion TF. Front-line battalions withdraw behind the security force and continue their movement to the rear AA. The alternative is to require the battalions to provide their own security in their sectors.

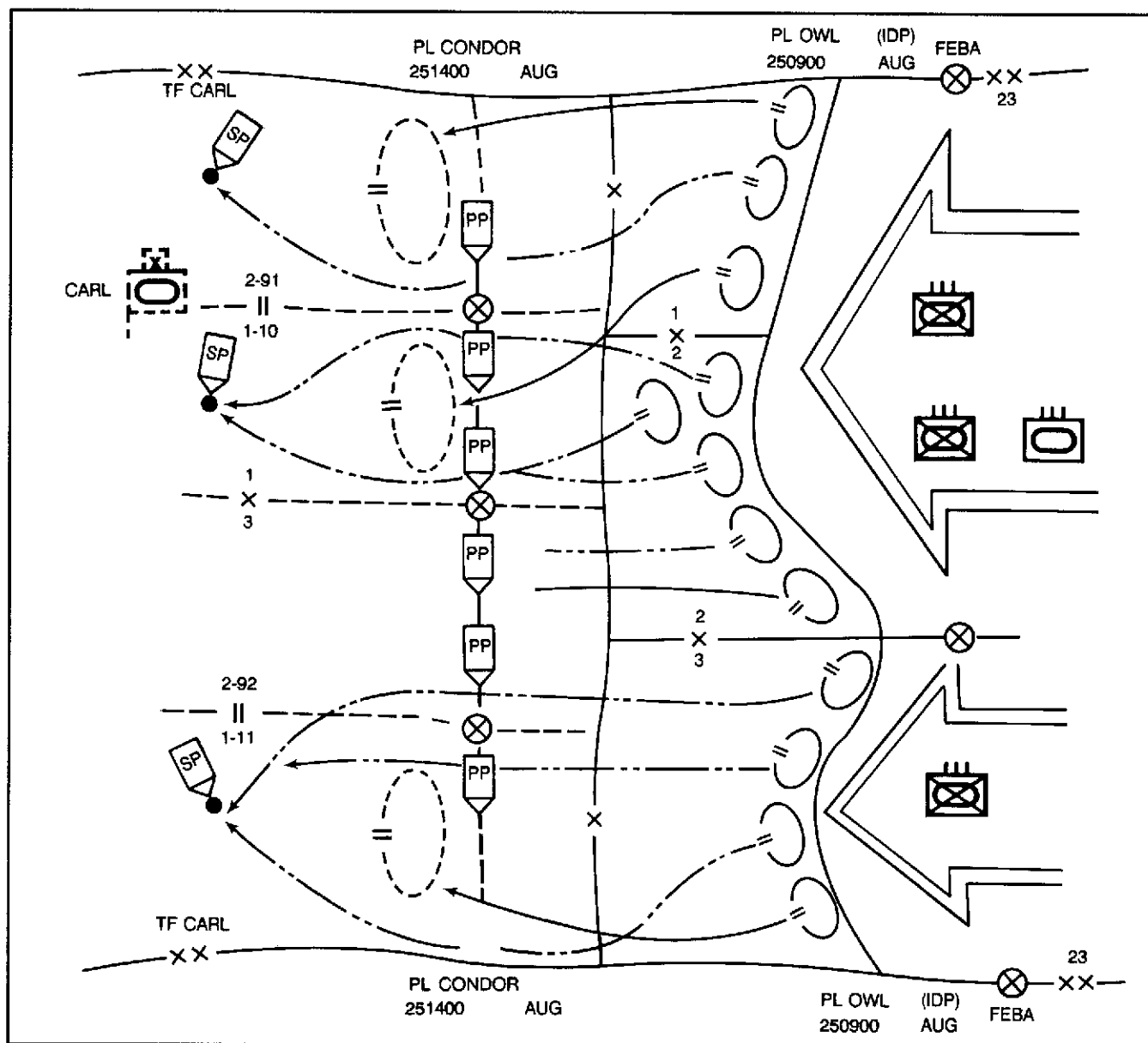


Figure 5-9. Brigade Security Force in an Unassisted Withdrawal.

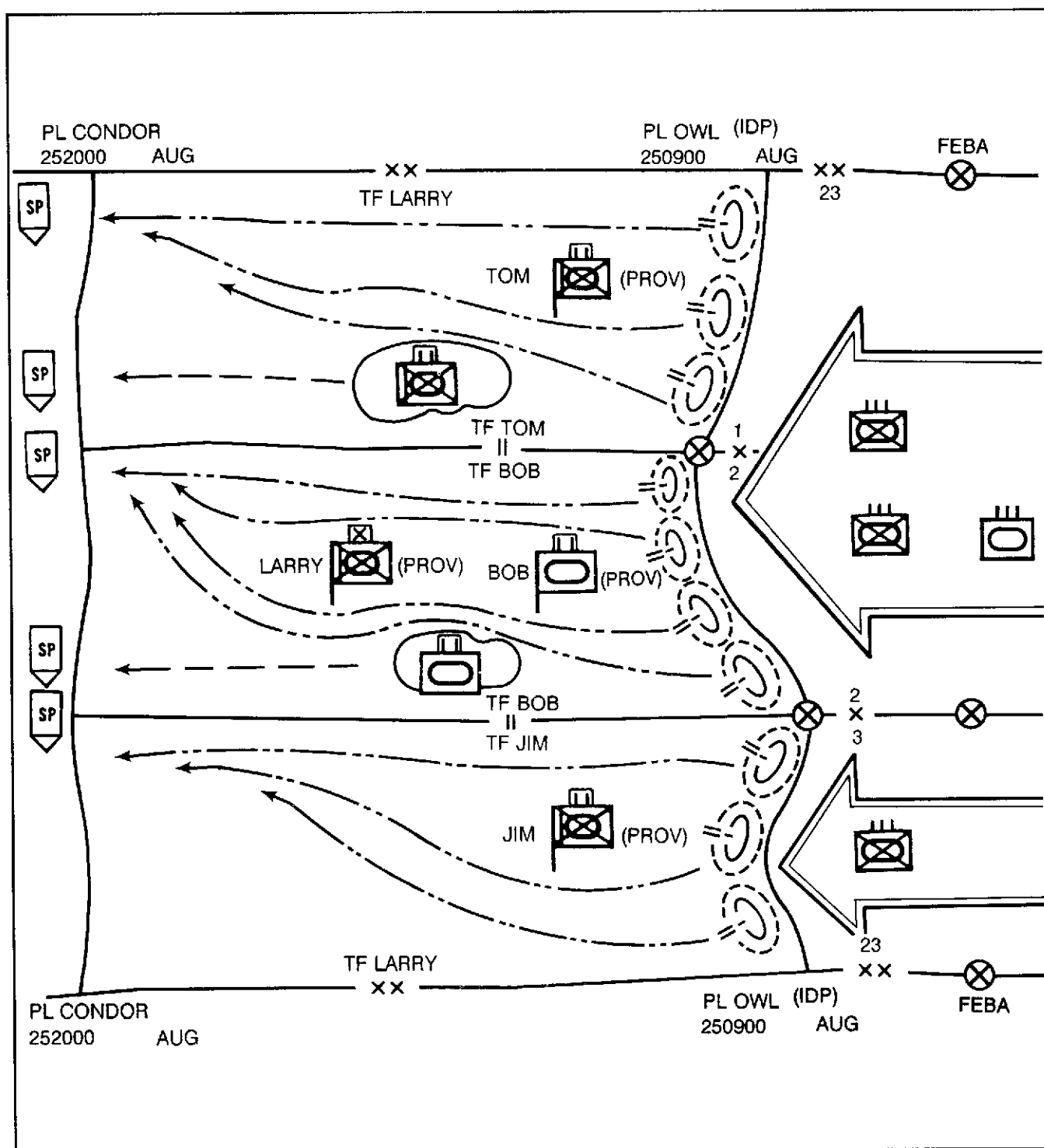


Figure 5-10. Brigade Withdrawal with Detachments Left in Contact.

In either withdrawal technique, the brigade commander must be prepared to revert to a delay or defense should the withdrawal be detected before disengagement or should the security force be unable to contain the enemy's pursuit.

Considerations for employment of CS and CSS assets are the same as in the delay.

RETIREMENT

A retirement is made following a withdrawal or when there is no actual contact with the enemy. When a withdrawal precedes the retirement, the retirement begins after the main forces have broken contact with the enemy and march columns have been formed. A retirement is conducted to—

- Occupy more favorable terrain.
- Conform to the disposition of another force.

- Permit the employment of the force in another sector.
- Increase the distance between the defender and the enemy.

A tank-heavy rear guard supported by FA, ADA, and tactical air support is normally required for a retirement. The rear guard uses delaying action techniques to slow the advance of the enemy and prevent interference with the movement of the main body.

The procedures for the conduct of a nontactical retirement are identical to those of a tactical road march. Nontactical movements are conducted only when contact with the enemy is unlikely. Enemy capability to employ airborne or air assault forces must be taken into consideration and route reconnaissance performed as required.

The brigade S4 plans rearming, refueling, and repair of the brigade's equipment upon closure in its new AA.

Section VII. BRIGADE REAR OPERATIONS

The AirLand battle will be fought deep, close, and in the rear. The enemy will attack the entire depth and width of the battlefield to obtain victory. In the operational context, the primary purpose for conducting rear operations is to retain overall freedom of action for fighting close and deep operations. Rear operations represent a critical fight for the brigade commander. The AirLand battle cannot be won solely by fighting in the rear but could well be lost there.

Rear operations consist of those actions, including area damage control, taken by all units singly or in a combined effort, to secure the force, neutralize or defeat enemy operations in the rear, and ensure freedom of action in the deep and close operations. It is a system designed to ensure continuous support. Rear operations are not just the protection of logistics facilities. Rear operations include movement of friendly units throughout the rear area. Tactical combat forces may be required to defeat the rear threat. Rear operations may divert forces from the brigade close operation.

The brigade commander is responsible for plans and operations throughout the depth of his area of operations. He assigns tasks to subordinate and supporting

commanders to execute those responsibilities. The brigade S3 includes detailed planning for the entire rear area as part of operational planning for offensive and defensive missions.

The FSB commander is responsible for the BSA. For security purposes, this includes the operational control of all elements operating within the BSA. Consistent with the commander's estimate and when allocated appropriate forces, the FSB commander may be assigned additional rear area functions.

REAR OPERATION OBJECTIVES

Brigade planning considerations for rear operations include—

- Securing the rear areas and facilities.
- Preventing or minimizing enemy interference with C3.
- Preventing or minimizing disruption of CS and CSS to forward units.
- Providing unimpeded movement of friendly units throughout the rear area.

- Finding, fixing, and destroying enemy incursions in the rear area.
- Providing area damage control after an attack.

BASE DEFENSE OPERATIONS

When developing his overall plan, the brigade commander ensures that the positioning and organization of the BSA supports the rear operation objectives. The FSB commander is responsible to the brigade commander for the security, positioning, and operation of the BSA.

Well-planned and tenacious base defense is the cornerstone of successful rear operations. Base defense operations include all actions that units occupying a base take to protect themselves from the enemy. They consist of a combination of passive and active measures, including MP patrolling and reconnaissance operations, hardening and dispersal actions, cover and concealment, deception, and immediate reaction to

enemy threat or attack. Base defense operations are enhanced by the extensive use of obstacles, sensors, surveillance devices, and OPs. Supporting units must be prepared to conduct small-unit security operations and defend themselves against all levels of threat.

Units operating within the BSA are OPCON to the FSB commander for security and positioning within the BSA. All elements operating within the BSA establish radio, wire, or messenger communications with the FSB TOC. The FSB CP and brigade rear CP collocate to facilitate coordination and rear area security.

Areas in the rear that are devoid of tactical units or are isolated because of troop disposition should be reconnoitered by MP patrols. Coordination with other divisional and nondivisional assets deployed within the brigade area of operations must occur to ensure overall linkage of rear operations plans. The S3 coordinates patrolling and reporting with the MP unit commander as part of the MP area security mission.

Section VIII. ATTACK HELICOPTER OPERATIONS

Attack helicopter units can dominate terrain and avenues of approach for limited periods. They maneuver to gain a positional advantage for engaging the enemy from the flanks and rear. Attack units use terrain in the same manner as ground maneuver units. They are capable of reinforcing ground maneuver units. They are a maneuver element that normally attacks on a separate axis or direction from friendly ground forces, achieving greater surprise and survivability. Attack helicopters are especially suited to conduct counterattack and deep attack operations. Their effectiveness is increased when used as part of a JAAT. At times, attack helicopter battalions (ATKHB) or aviation brigades may have OPCON of ground maneuver units for conducting combat operations. Priorities for employment of attack helicopters are established by the senior force commander who has operational responsibility.

As a general rule, attack helicopter units are not attached below division. When it is necessary to give an ATKHB to a brigade, it is normally placed OPCON to the brigade rather than attached. The aviation brigade retains logistics support responsibility.

Attack helicopters are best employed in mass. The smallest unit that should be placed OPCON to a brigade is a battalion. An attack helicopter unit OPCON to a brigade is employed directly under brigade control. Occasionally, a battalion TF in heavy contact may be reinforced by an OPCON ATKHB.

Three techniques are used for mission accomplishment of attack helicopter units: continuous attack, phased attack, and maximum destruction.

The choice of technique is based on the commander's estimate of the situation and the higher commander's scheme of maneuver.

The success of attack helicopter operations is directly related to the detailed planning based on a thorough IPB. Engagement areas (EA) are planned in depth to ensure flexibility. Attack helicopter units use common graphic control measures to control their operations. Planning considerations for the employment of attack helicopter units include—

- AAs where the unit or element assembles in preparation for future actions.

- Holding areas located between AAs and battle positions.
- Air routes used for movement of attack helicopters.
- Forward arming and refueling points located as far forward as possible.
- Designation of EAs.

Attack helicopter units are employed with other maneuver units and indirect-fire support as part of the combined arms battle. Often, substantial SEAD operations are necessary to ensure the attack helicopters can survive. The brigade FSCoord is responsible for coordinating SEAD support. Coordination with the brigade S3 air is required to resolve airspace conflicts. Coordination is required for synchronized employment of artillery, attack helicopters, CAS, and other combined arms members. Key requirements that must be coordinated between the ATKHB and the brigade before employment include—

- Complementary initial and subsequent battle or attack positions.
- Named areas of interest (generated by IPB).
- Decision points (established to ensure that the attack helicopter commander is notified in time to maneuver the enemy).
- Fire distribution guidelines (EAs).
- Established target priorities.
- Locations of ground maneuver, FA, and ADA units.
- Fire support priorities.
- Fire support and obstacle overlays.
- Maneuver scheme.
- Coordination for movement and fires across sector boundaries.
- Battlefield control measures.
- Attack and displacement signals.
- Airspace C2.
- Use of laser designation systems.
- Common radio frequencies.
- Locations and methods for on-the-spot mission updates.
- Flight route and air attack axis.
- Rehearsals.

This chapter implements STANAGs 2031, 2099, 2147, 2868 and 2963.

CHAPTER 6

COMBAT SUPPORT

The application of superior combat power at the decisive time and place determines the outcome of the battle. The brigade commander uses his CS assets to enhance the capabilities of his maneuver battalions and weight his main effort within the brigade. The brigade S3 plans and coordinates CS assets in the tactical

plan. Based on guidance and changing priorities from the commander, the brigade XO requests additional assets from division when necessary and coordinates and integrates CS assets. CS assets provide support to the brigade according to standard command or support relationships.

Section I. FIRE SUPPORT

Fire support is the collective employment of FA, mortars, tactical aircraft, attack helicopters, and NGF in support of a battle plan. The brigade commander integrates all fire support and maneuver assets to maximize combat power for the combined arms team. As he develops his battle plan for the employment of maneuver forces, he must visualize how he will use his fire support resources, which subordinate echelon he will weight with fire support, and what targets to attack. This helps him establish priorities for engaging targets

and allocating fires. The commander and his S3 ensure the fire support plan enhances the maneuver plan and all available fire support is considered.

FIRE SUPPORT SYSTEM

The fire support system provides close support for maneuver forces, counterfires, interdiction, and other fires, as required. These fires range from suppression of antitank guided missiles (ATGM) to suppression of

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enemy air defenses. They neutralize or destroy enemy attack formations or defenses or destroy targets deep in the enemy's rear with long-range missile fires.

Close support fires engage enemy troops, weapons, or positions that are threatening or can threaten the force. They allow the commander to multiply combat power effects rapidly, shift fires quickly about the battlefield, and provide a more favorable combat ratio. Smoke obscures the enemy's vision, degrading its weapon capability. High explosive (HE) with fuze VT (variable time) and dual-purpose improved conventional munitions (DPICM) cause enemy tanks to button up and slow down. Thus, enemy observation, flexibility, and command and control are reduced. Also, portions of the enemy force are isolated, which allows concentration of friendly direct fires on isolated targets. Close indirect-fire support expands battlefield depth, erodes enemy forces, and inflicts damage well beyond direct-fire ranges.

Counterfires must be considered in developing a scheme of maneuver. Counterfires attack enemy indirect-fire systems, observation posts, and field artillery command and control facilities. Counterfire is accomplished with mortars, cannons, and aircraft and is not solely an artillery battle. These fires are planned and executed for offensive and defensive operations. They also respond to an immediate request from a maneuver commander.

Interdiction fires disrupt, delay, and destroy threat forces that are beyond the line of sight and cannot fire their primary weapon systems on friendly forces. Targets include first-echelon forces not committed in the direct battle and second-echelon units. The purpose is to create windows for friendly unit offensive maneuvers.

BRIGADE COMMANDER AND FSCOORD

The brigade FSCOORD is the commander of the DS FA battalion that supports the brigade. He is the brigade commander's primary advisor on fire support matters. He maintains a working relationship with the brigade commander and his S3 through the planning and execution phases of an operation. The FSCOORD must be thoroughly familiar with the maneuver operation so he can anticipate missions and changes to the tactical situation. He is located where he can provide

the greatest degree of control over the fire support assets available to support the maneuver commander's plan.

The FSCOORD's primary responsibilities include —

- Establishing and supervising the FSE.
- Planning and coordinating fire support on surface targets.
- Supervising preparation of the fire support plan and integrating it into the brigade's operation plans and orders.

The maneuver commander and his FSCOORD plan the battle together. Examining fire support's contribution to the battle plan concurrently with maneuver considerations increases the commander's chances of using all available fires. This planning includes evaluation and determination of —

- Attack guidance.
- Target selection standards.
- Avenues of approach.
- Interdiction opportunities.
- Weapon systems orientation and task organizations.
- Support of objectives or defensive positions.
- Methods of attack or defense.
- Time of attack or counterattack.
- High-payoff targets.
- Designation of target areas of interest.
- Coverage of obstacles.

In some cases, fire support considerations may drive the scheme of maneuver. If there are insufficient maneuver assets to make the mission viable, fire support may accomplish a portion of the mission without commitment of large troop concentrations. The brigade commander and his FSCOORD plan fire support as follows:

- They determine through the wargaming process where the enemy must be slowed or where enemy positions must be breached for maximum total

firepower effects. TAI and NAI developed through the IPB process are integrated into the scheme of fire support.

- They prioritize the expected enemy target array. High-payoff targets are identified using IPB products with the guidance provided by target value analysis. Target acquisition assets are directed to locate those high-payoff targets.
- They consider all weapons and combat multipliers available to the brigade: direct fires, CAS, Army aviation, FA, mortars, NGF, and all possible munitions combinations and ordnance mixes. The FSCOORD, through the FSE, plays a significant role in the integration of the available fire support assets. The FSE continuously coordinates the efforts of the battle staff to ensure that all assets are integrated in the maneuver commander's plan.
- They execute concurrent planning upon receipt of a mission, continue development of the course of action, refine the operational concept, and execute the plan to develop combat power.

While the FSCOORD participates with the commander, S3, and S2 in the planning and execution of the battle, he also plans and coordinates for the execution of the fire support plan. The FSCOORD must also plan for the displacement of his firing batteries to ensure continuous, responsive fire support; he coordinates with the brigade S3 to manage terrain for his batteries, including those of supporting artillery battalions.

FIRE SUPPORT PLANNING

Fire support planning determines how and in what volume fires will be used, what type of targets will be attacked, when, and with what means. The plan must be sufficiently flexible to accommodate the unexpected in combat. When planning fires, the FSCOORD must consider METT-T, the commander's intent, and fire support guidance. Planning is enhanced when detailed IPB is conducted and the TVA process is incorporated to identify high-payoff targets.

The brigade commander's intent determines the specific role that fire support will play in the brigade scheme of maneuver. The FSCOORD plans fires and allocates resources as the brigade commander

outlines his scheme of maneuver. The FSCOORD must know when and where the commander wants fire support. In addition, he must fully understand what the commander wants in the way of effects, duration, and timing. The FSCOORD must understand the commander's critical targets, target areas, and the target priorities. He must also understand how all the unit's combat power, such as direct fire, mortars, obstacles, IEW, smoke, CAS, attack helicopters, and AD, will be integrated with the field artillery.

The depth and complexity of the fire support plan depend upon the time available to produce it. At brigade level, it may be the result of both the formal and informal fire planning process. The key to a successful fire support plan, however, is simplicity.

FIRE SUPPORT EXECUTION

Execution of the fire support plan is a combined arms responsibility. The success of the fire support plan depends on how well it is understood by subordinate commanders and FSOs. The fire support plan and the brigade OPORD must be rehearsed and specific responsibilities assigned. The brigade fire support execution matrix provides subordinate commanders and FSOs a summary of the plan which ties the execution of fire support to specific events and assigns specific responsibility for that execution.

FIELD ARTILLERY-DELIVERED FASCAM

FA-delivered FASCAM provides the brigade commander with his most responsive FASCAM delivery system. FA-delivered FASCAM does have the following limitations:

- It may detract from the FA's ability to deliver other close support fires. Therefore, the commander must set priorities for the delivery of FA-delivered FASCAM.
- The inherent limitations of the delivery system may restrict employment.
- Logistics requirements are significantly increased because FA units normally carry a limited amount of FA-delivered FASCAM. Preplanned FASCAM are emplaced with prestocked munitions to partially overcome this limitation.

Section II. TACTICAL AIR SUPPORT

Tactical air support is a significant combat multiplier for the brigade commander. The tactical air available to him is BAI, CAS, and tactical air reconnaissance.

BATTLEFIELD AIR INTERDICTION

BAI consists of attacks against close-in interdiction targets which can be expected to have a near-term effect on the ground battle but that are not yet near friendly troops. BAI is one of the brigade's limited means of conducting deep operations. The brigade S2, FSO, and S3 work together to nominate BAI targets.

CLOSE AIR SUPPORT

CAS is defined as air attack of hostile ground forces that are close to friendly troops. CAS requires the detailed integration of each mission into the supported commander's scheme of fire and maneuver. Nomination of CAS targets is the responsibility of the FSE as supervised by the S3.

TACTICAL AIR RECONNAISSANCE

Tactical air reconnaissance is designed to furnish timely and accurate tactical information on the location, composition, activity, and movement of enemy forces. It is best used in support of the anticipated battle 12 to 24 hours ahead; for that reason, it is usually tasked at division level or higher. The brigade S2 requests tactical air reconnaissance in support of his collection process to provide information to support targeting and aid in formulation of future tactical plans.

TACTICAL AIR CONTROL SYSTEM

The USAF's tactical air control system consists of personnel, facilities, and communications through which tactical air is planned, coordinated, and directed. At the brigade level, USAF support is coordinated by the TACP. The senior USAF officer is the ALO; he commands the TACP. The brigade ALO serves as the air support advisor to the commander.

CLOSE AIR SUPPORT REQUEST AND COORDINATION CHANNELS

Planned Missions

Planned missions are those for which a requirement can be foreseen. They permit detailed planning, integration, and coordination with the ground tactical plan. Typical planned missions are preassault bombardment and BAI of key bridges or lines of communications. Planned missions are the most desired because munitions can be tailored precisely to the target and complete mission planning can be accomplished.

Normally brigades nominate BAI missions to division. These missions are then analyzed at division in support of the division plan. Division forwards the nomination on to corps for approval; however, a minimum of 24 hours' advance planning time is required when the brigade nominates BAI.

Immediate Missions

Immediate missions are executed in response to requests from supported ground commanders to fulfill urgent requirements that could not be foreseen. Details of the mission generally are coordinated while aircraft are airborne. Immediate missions are processed primarily through USAF channels.

Section III. JOINT AIR ATTACK TEAM OPERATIONS

The JAAT is an aviation operation capable of adding to the lethality of combined arms operations. The JAAT may operate integrated into close operations, or it may operate independently to the

to the front of ground units. A JAAT is a highly mobile and lethal tank-killing force that can engage the enemy beyond the range of ground antitank weapons.

The JAAT can be employed during the conduct of offensive or defensive operations; it is especially useful to counter enemy airborne or air assault insertions in friendly rear areas. A JAAT can be employed to accomplish specific tasks during the conduct of combined arms team operations. Offensively, the commander can best use the team against enemy counterattacks or in the exploitation or pursuit role.

The ground maneuver commander has overall responsibility for planning and employing the JAAT. When the brigade commander determines that his maneuver forces need increased combat assets to attack a lucrative target array, he requests attack helicopters and CAS aircraft. When attack helicopters are OPCON to a brigade, the commander, on the advice of his FSCoord, ALO, and ATKHB commander, requests CAS aircraft through preplanned or immediate air channels.

Planning a JAAT is a complex operation requiring detailed coordination among the brigade commander with the S3, FSO, ALO, and ATKHB commander. The

scheme of maneuver, CAS, and fire support must be integrated to the maximum extent possible. Planning considerations include—

- Nature of target.
- Enemy avenues of approach.
- Fire support coordination.
- Airspace control.
- Provisions for SEAD.
- Communications.
- Current ground tactical plan.
- Contact points and initial points.
- Weather.

Although JAAT assets may be requested and planned for, the brigade commander must be prepared to execute his maneuver plan without some or all of the JAAT components.

Section IV. NAVAL GUNFIRE SUPPORT

Naval gunfire can provide large volumes of fire support to combat forces operating close to coastal waters. These fires may be in support of amphibious operations within range of naval firepower. An air and naval gun

fire liaison platoon provides the brigade personnel and communications to plan, request, coordinate, and control naval air and gunfire at the brigade and maneuver battalion levels.

Section V. ENGINEER SUPPORT

DIVISIONAL BRIGADE ENGINEER SUPPORT

A divisional brigade is normally supported by its habitually associated divisional engineer company. Engineer assets are allocated by the division commander according to his overall tactical plan. When the brigade is committed, corps engineer augmentation usually provides the brigade with the equivalent of a battalion or more of engineers. The brigade commander's primary point of contact for engineer expertise, planning, and coordination is the brigade engineer. Regardless of the command or support relationship of supporting engineer units, the brigade engineer is the focal point for all engineer plans and operations within the

brigade's area of operations. The brigade engineer section provides the commander continuous planning and supervision of brigade engineer assets. The section operates from the brigade TOC and maintains communications with the divisional engineer battalion, assistant division engineer, and engineer assets employed within the brigade sector.

SEPARATE BRIGADE ENGINEERS

The separate brigade receives its engineer support from its organic engineer company. Corps engineers usually augment this company. The separate brigade also has a brigade engineer on the staff.

ENGINEER PLANS

Coordinated engineer planning ensures that engineer combat resources support the elements of the battle plan—the scheme of maneuver, the plan for fire support, and the CSS plan. Engineer planning for support is performed concurrently with planning for other battle elements. Such planning ensures that adequate forces, materiel, and equipment are concentrated at the critical times and places.

ENGINEER MISSIONS

Engineer missions in the brigade area can be divided into four basic roles:

- Countermobility operations. Countermobility is obstacle construction. Obstacles are used to decrease enemy mobility without hindering friendly maneuver. In open areas, obstacles extend the amount of time enemy units are exposed to friendly fire.
- Mobility operations. Mobility operations reduce the effects of existing or reinforcing obstacles to improve the movement of combined arms forces and critical supplies. Mobility operations are a part of offensive and defensive operations.
- Survivability operations. Survivability operations are characterized by the employment of protective measures that decrease the lethality of the enemy's firepower while units fight and maneuver. Survivability measures include the use of counter-surveillance measures, such as camouflage, deception, smoke, and the construction of protective positions.
- Sustainment engineering operations. Engineers perform sustainment engineering tasks to ensure the continuous supply of CS and CSS assets forward. Sustainment engineering tasks include replacement of tactical bridges, construction and repair of support facilities, and area damage control.

FAMILY OF SCATTERABLE MINES

A wide range of FASCAM assets is available to the brigade commander. Artillery-delivered FASCAM, Army aviation- and Air Force-delivered FASCAM, and

engineer-emplaced FASCAM must be integrated into the commander's scheme of maneuver in offensive and defensive operations.

FASCAM provides a rapid and responsive obstacle emplacement capability to the brigade. The brigade S3 and brigade engineer plan and coordinate use of FASCAM assets, regardless of the means of delivery. Each system has different characteristics in terms of patterns, self-destruct times, and responsiveness that must be considered in the planning process. Long self-destruct mines are those that self-destruct in more than 24 hours. Short self-destruct mines are those that self-destruct in less than 24 hours.

Accurate, timely, uniform reporting and dissemination of scatterable minefield emplacement information is a must. Fluid, fast moving tactical situations require that complete information on scatterable mine employment be passed in a simple, rapid manner to all units that could be affected.

The unit emplacing the mines immediately reports the pertinent information required by the most expeditious and secure means. The report is sent through operations channels to the headquarters authorizing the minefield.

The corps commander is the approving authority for the employment of all scatterable mines in the corps area. He usually delegates this authority to the division commander, who often retains the authority for emplacement of long self-destruct mines at his level but frequently delegates approval authority for short self-destruct mines to the brigade commander. When the division commander does delegate approval for long self-destruct mines to the brigade commander, it is for a specific period of time or for a particular operation. The brigade commander may further delegate short self-destruct mine employment authority down to battalion TF commanders with the concurrence of the division commander. Any delegation of authority to employ scatterable mines must be specifically stated in the applicable OPORD; otherwise, the authority is automatically withheld.

LOGISTICS CONSIDERATIONS

Engineer operations in the brigade area require close coordination among the brigade engineer, brigade

staff, and the FSB commander for logistics support. The high density of Classes IV and V obstacle material requires early planning and a coordinated push forward through the BSA. Mines and barrier materials must be forecast by the brigade S4 and provided by the FSB based on preliminary estimates by the brigade engineer and FA battalion S3.

FASCAM delivery is planned and coordinated between the brigade engineer and the delivery agency, be it supporting engineer units, artillery, Air Force, or Army aviation.

Maintenance support for engineer units operating in the brigade area must be closely coordinated among the unit, its own parent unit, and the maintenance support elements in the BSA. Common equipment unit-level maintenance is provided by the supported unit. Engineer equipment maintenance is critical to unit survivability. Intermediate DS maintenance is provided by the FSB to rapidly return the equipment to the fight. Medical support is provided by the supported unit.

Section VI. INTELLIGENCE AND ELECTRONIC WARFARE SUPPORT

The divisional military intelligence battalion provides IEW support to the division commander and the subordinate elements of the division. The assets of the battalion deploy as MI company teams, task organized and given standard tactical missions based on the commander's concept of the operation and the factors of METT-T.

The MI company team's assets normally deploy well forward in the brigade's area of operations, usually within 5 km to 10 km from the FLOT. They are positioned after coordination between the brigade S3 and the intelligence and electronic warfare support element. The IEWSE serves as the MI battalion commander's liaison to the maneuver brigade from the MI battalion and the MI company team. Some or all of the following elements may be found in the MI company team:

- A collection and jamming (C&J) platoon.
- Counterintelligence (CI) team(s).
- Interrogation team(s).
- A signal intelligence and processing platoon.

The GSR sections are normally attached to the brigade.

The separate brigade has an organic MI company. Its structure includes the following:

- A service platoon.
- Two C&J platoons.

- A ground surveillance platoon.
- An operations and support platoon (CI and interrogation).

INTELLIGENCE AND ELECTRONIC WARFARE SUPPORT ELEMENT

The IEWSE deploys with the brigade as an additional staff element. It advises the brigade in all IEW operations conducted by the MI company team. The IEWSE passes the IEW needs of the brigade to the MI battalion tactical operations center for action. The IEW support officer develops EW target lists and jamming schedules that are synchronized with all intelligence and combat information acquired by the MI company team in the brigade sector to the brigade staff. He also coordinates all movement and service support requirements of the MI company team's assets with the brigade staff.

COLLECTION AND JAMMING PLATOON

The C&J platoon provides voice communications intercept and jamming capability to the divisional force it supports. Collection and jamming assets normally deploy well forward in the brigade's area of operation; they occupy terrain where the best radio line of sight can be achieved. Regardless of the tactical mission or the command relationship specified for the MI company team, the results of intercept and jamming operations conducted by C&J platoon assets deployed within the brigade sector are provided to the brigade by the

IEWSE. Further, the IEWSE has access to the consolidated collection efforts of the entire MI battalion through the IEW support officer's link to the MI battalion TOC; this information is also available to the brigade.

COUNTERINTELLIGENCE SUPPORT

The CI team supports the division to protect its operations from the intelligence threat, subversion, sabotage, and terrorism. The CI teams of the MI battalion are normally deployed in the brigade and division rear areas. With corps augmentation, the CI team or teams may be placed in DS or even attached to the brigade to perform specific CI missions for a specific period of time.

Interrogation teams usually operate from the division's EPW collection point. As with the CI teams, given corps augmentation, interrogation teams can be in DS or attached to the brigade for specific missions. Although not usually a timely source of information, interrogation reports can provide the brigade commander

with answers to PIR that may not otherwise be collected through electronic or visual means.

GROUND SURVEILLANCE RADAR

GSR teams are normally attached to the maneuver brigade to provide a 24-hour battlefield surveillance capability. GSR teams may be employed on patrols or at OPs; they are used with night observation devices when these are available. They can also be used with the thermal sights on various weapon systems to assist gunners in target acquisition. They can be employed near the FLOT, forward of the FLOT, or on the flanks in a screening role. They can be used in surveillance of gaps between units or rear areas at possible drop zones or landing zones.

Normally, the teams provided to the brigade are attached to subordinate battalions. The brigade may retain control of some of the GSR assets to give the S2 more direct access to the collected information in the rear area operations.

See FM 34-80 for detailed information on all MI assets operating in the brigade area.

Section VII. AIR DEFENSE SUPPORT

The maneuver brigades conducting close operations must be protected against enemy ground attack, high-performance aircraft, and helicopters. Simultaneously, in the rear, high-priority assets must likewise be protected from enemy air strikes and heliborne assaults.

The brigade commander must determine for each operation the priorities for AD coverage, allocation of

available ADA assets, and common and support relationships that best support his situation.

AD units may be provided to the brigade with the following command and support relationships:

- Direct support.
- OPCON.
- Attached.

Section VIII. NUCLEAR, BIOLOGICAL, CHEMICAL OPERATIONS

PLANNING OPERATIONS IN AN NBC ENVIRONMENT

The enemy's ability to use weapons of mass destruction requires that commanders prepare for enemy use of NBC weapons. Every tactical plan should attempt to minimize the brigade's vulnerabilities to nuclear and

chemical employment by the enemy within the confines of the mission.

NBC reconnaissance is part of conventional reconnaissance; in addition to looking for enemy activity, reconnaissance elements check for contaminated and clean areas. Collected data provide the NBC section a

picture of NBC activity within the brigade sector. When contamination is detected, it is marked and reported so other units will not enter it by mistake.

NBC WARNING AND REPORTING

The NBC warning and reporting system is a rapid means of sending reports of an NBC attack. These reports warn other potentially affected units of possible contamination and report contaminated areas up and down the chain of command and to adjacent units. Each report has a specific purpose and uses standard codes to shorten and simplify the reporting process.

The units affected by a friendly nuclear or chemical strike must be warned (using a NUCWARN or CHEMWARN) by the parent headquarters. Warnings must be delivered swiftly so strikes can be delivered on time. Warnings are encoded or sent by secure means so that they do not warn the enemy. If insufficient time remains for the enemy to react prior to the attack, the warning may be sent in the clear.

MISSION-ORIENTED PROTECTIVE POSTURE (MOPP)

MOPP is the flexible use of protective clothing and equipment that balances protection with performance degradation and risk. Wearing MOPP gear causes heat and mental stress and reduces efficiency. The higher the MOPP level, the more protection it provides, but the more it will degrade performance. The leader has to weigh the needs of individual protection against unit efficiency.

DECONTAMINATION OPERATIONS

Protective clothing and equipment provide only a temporary solution to contamination. While all units are trained and equipped for self-decontamination, conditions may exceed normal unit capabilities. The guiding principles of decontamination operations are to decontaminate as soon and as far forward as possible consistent with the unit's mission and the nature of the contaminant. Units may have to fight dirty or partially decontaminated for several hours. When multiple units are contaminated, commanders must prioritize what units to decontaminate.

Section IX. SMOKE OPERATIONS

Properly planned and executed smoke operations become a combat multiplier when they increase survivability of friendly forces and degrade enemy command, control, communications, and intelligence capabilities. Specifically, smoke can be used to—

- Deny the enemy information.
- Reduce effectiveness of enemy target acquisition means.
- Restrict nap-of-the-earth and contour approaches for aircraft.
- Disrupt enemy movement, operations, and command and control.
- Create conditions to surprise the enemy.
- Deceive the enemy.
- Weaken the thermal effects of nuclear weapons.

The brigade employs two categories of smoke—hasty and deliberate. Hasty smoke is employed for short-term requirements with a minimum of planning. It may be delivered by all smoke assets, but it is normally delivered by artillery, mortars, and smoke pots. Deliberate smoke is characterized by integrated planning. It is used over extended periods to cover friendly activities throughout an entire operation. Although it is normally employed to conceal friendly units, it may also be used to blind enemy units. Deliberate smoke is normally produced by mechanical generators and smoke pots. Either type of smoke can be used to deceive the enemy.

Smoke has four general applications on the battlefield:

- Obscuration smoke. Obscuration smoke is employed on or against the enemy to degrade its vision both within and beyond its location.

- Screening smoke. Screening smoke is employed in friendly area of operations or in areas between friendly and enemy forces to degrade enemy ground and aerial observation and defeat or degrade enemy electro-optical systems. Screening smoke is employed to conceal ground maneuver, breaching and recovery operations, key AAs, and supply routes.
- Deception smoke. Deception smoke is used to deceive the enemy regarding intentions of friendly

forces. For example, smoke can be employed on several avenues of approach to deceive the enemy as to the avenue of the main attack.

- Identification or signaling smoke. Signaling smoke is employed to identify targets, supply and evacuation points, and friendly unit positions; it also provides for prearranged battlefield communications.

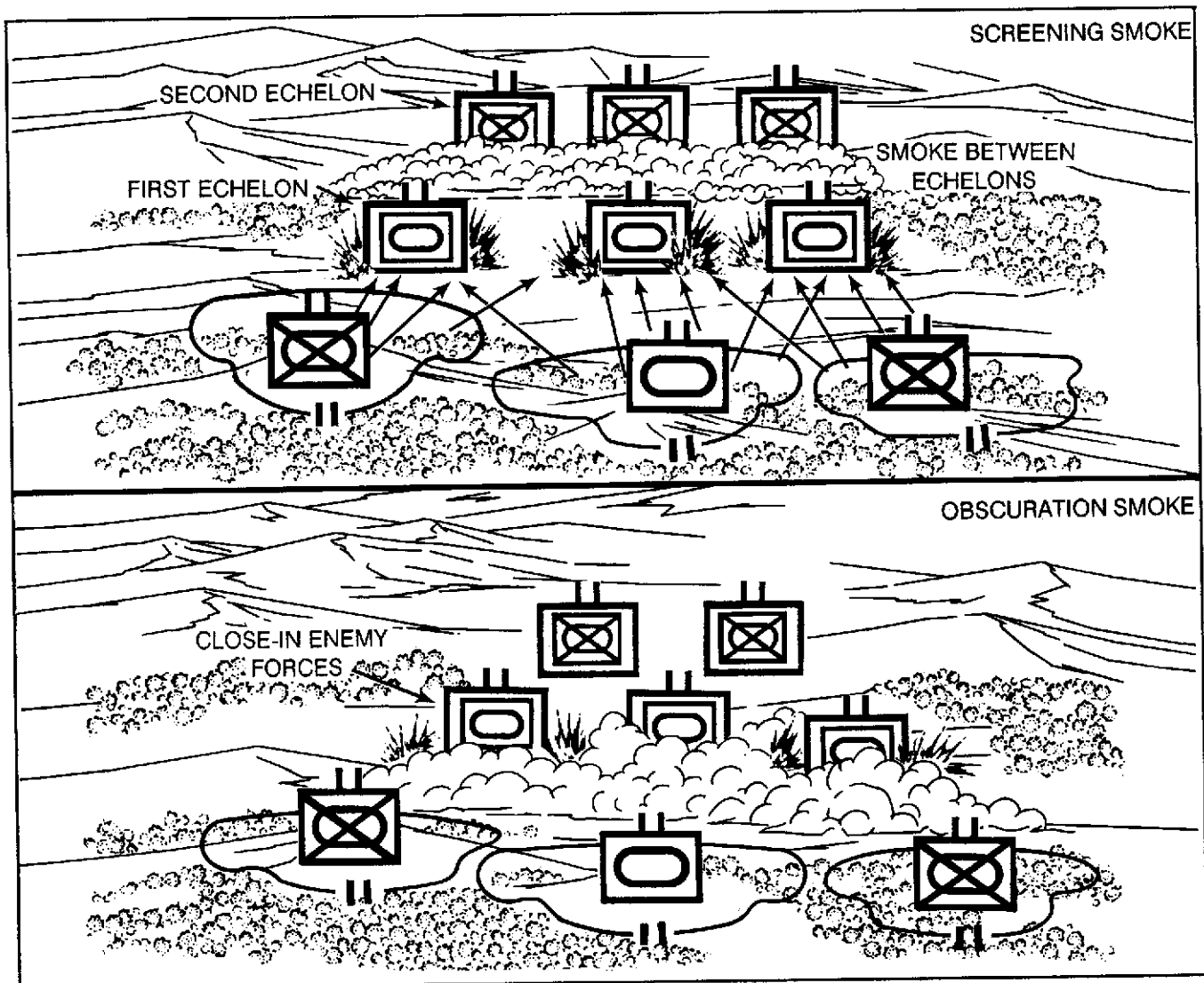


Figure 6-1. Screening and Obscuration Smoke.

Smoke planning is a part of the overall tactical plan. Each echelon of command plans for employment of smoke to support its operations. The brigade S3 has primary staff responsibility for planning smoke operations with the advice and support of the FSO, S2, S4, chemical officer, and staff weather personnel.

In the offense, smoke can be used to deny the enemy information about the size and composition of friendly forces and location of the main attack. A smoke screen can be placed either to the front or to the flanks. When the enemy cannot be screened effectively, obscuring smoke may be required. To support offensive operations, smoke generators remain mounted on vehicles.

Section X. MILITARY POLICE SUPPORT

Divisional brigades receive support from the divisional MP company to accomplish the four MP battlefield missions:

- Battlefield circulation control operations.
- Area security operations.
- EPW operations.
- Law and order operations.

The senior MP directs and supervises the MP unit in the execution of its assigned missions, which may include any or all of the MP battlefield missions. He directs the employment, technical operation, training, and security of the unit and any attached U.S. or host-nation military police. When the MP unit operates in DS of a brigade, the senior MP directs MP activities within the brigade area of operations as required by the brigade commander.

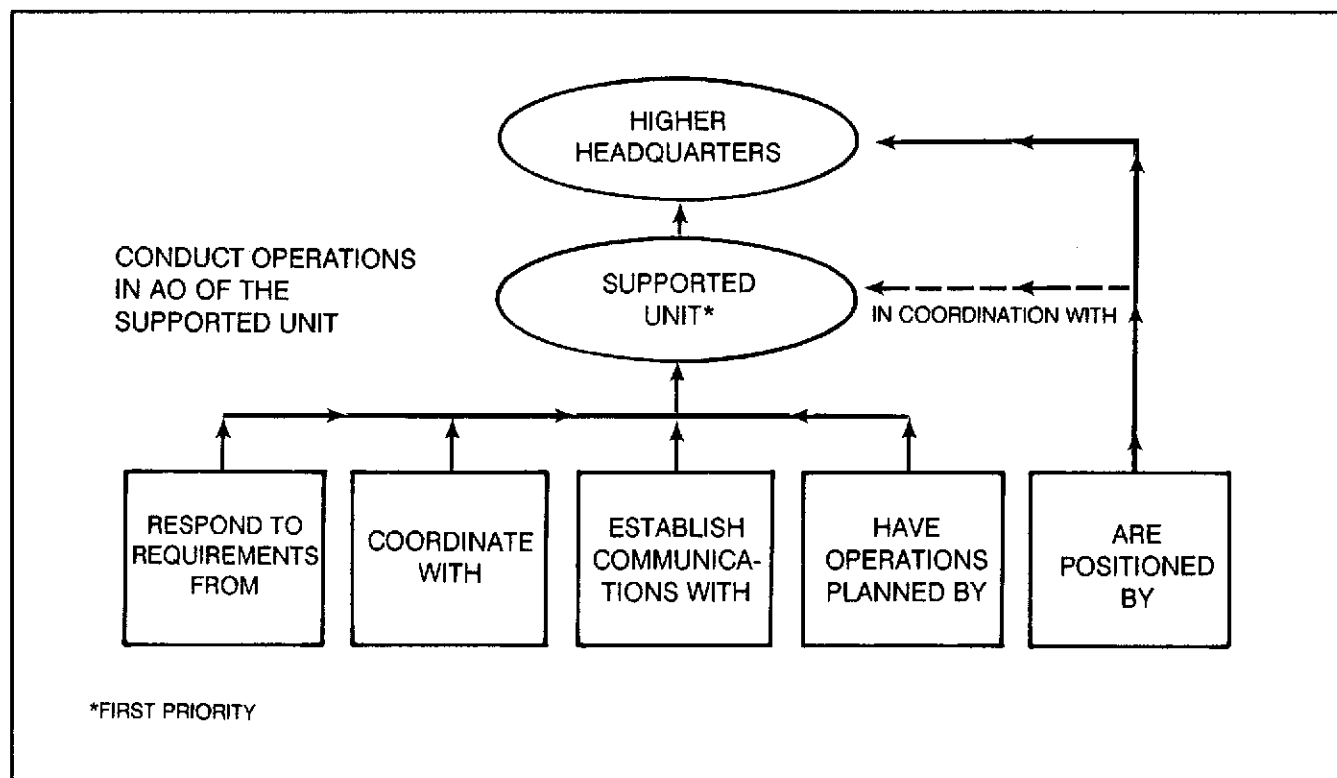


Figure 6-2. MP Units Providing Direct Support.

Military police support in separate brigades is provided by the provost marshal section and an MP

platoon organic to the brigade HHC. Employment of the platoon is identical to divisional MP platoons.

Section XI. SIGNAL SUPPORT

Signal support to the divisional brigade is provided by a communications platoon organic to the brigade headquarters company and by a signal platoon from the division signal battalion.

BRIGADE SIGNAL PLATOON

The organic signal platoon of the brigade HHC provides the following communication systems and services to the brigade CPs:

- Wire line installation, operations, and maintenance.
- Switchboard installation, operations, and maintenance.
- Radio teletype operations.
- Limited FM radio maintenance.
- FM radio retransmission.
- Evacuation of COMSEC materiel.

These communication systems and services provide internal brigade communications to subordinate battalions, extensions to units normally attached, and FM radio communications with the division. The brigade signal officer not only provides staff expertise in areas of communications but also exercises OPCON over the HHC communications platoon.

COMMUNICATIONS SUPPORT TO THE BRIGADE

The brigade is also supported by a platoon from the forward communications company of the division signal battalion. The platoon provides the following communication systems and services to the brigade:

- Secure multichannel communication facilities to link and terminate divisional multichannel communication systems.
- A secure RATT station for operation in the division general purpose (GP) net, GP RATT.

- Net ratio interface (NRI) facilities to convert mobile signal-channel FM radio stations to the division telephone system.

- Automated switchboard service at the BSA to provide switching of local area telephone circuits and trunks to permit access to the division telephone network for all subscribers.

The forward area signal nodes interface with other division area signal nodes to form the division multi-channel communications system.

MULTI-SUBSCRIBER EQUIPMENT (MSE) WITHIN THE DIVISION AND BRIGADE

The division signal battalion deploys extension nodes forward in support of the maneuver brigade's CP wire subscribers. Mobile subscribers using mobile subscribers radio telephone (MSRT) down to maneuver battalion headquarters and forward deployed screening forces must be supported by forward deployment of a radio access unit (RAU). The RAUs provide MSRTs access into the MSE network.

MSE's major roles are to furnish CP communications for forward brigades to the corps rear and to furnish MSRT service for high-priority users. MSE enhances CP movement by providing continuous secure telephone-like service to users with MSRTs during movement. MSE also permits facsimile voice communications from division to brigade and battalion. Command post setup and teardown times are greatly reduced because wire and cable requirements are reduced.

MSE relies on common-user switching to provide continuous support to rapidly deploying maneuver elements. Simply stated, communications are no longer a liability to mobility. The MSE switching network allows the mobile or wire subscribers to dial any other subscriber in the network, regardless of the called party's location. The caller must simply know the called party's

phone number. The search features enable the MSE switchboard to find the number anywhere on the battlefield.

Generally, the first priority for division assets is support of the maneuver brigade CPs, then forward deployed DS units and the division level C2 elements.

SEPARATE BRIGADE SIGNAL SUPPORT

The CE staff section of the separate brigade has more extensive capabilities because of its requirement to interface at corps level. The section consists of the section staff, a CP signal support platoon, a BSA signal platoon, and a CE maintenance section.

CHAPTER 7

COMBAT SERVICE SUPPORT OPERATIONS

The objective of CSS is to maintain maximum combat power and momentum by sustaining combat forces. The brigade commander plans his tactical and CSS operations concurrently. He ensures that his scheme of maneuver and fire support plan are logistically supportable. If CSS planners identify constraints, the commander must evaluate the risks. If necessary, the commander establishes new priorities or modifies his tactical plan to eliminate or reduce the effect of the constraints.

CSS leaders must move forward to coordinate with supported units, gain the needed information, and push standard logistics packages (LOGPAC) forward. The personal involvement and on-the-scene appraisal of the situation by CSS personnel is as important to mission

accomplishment as is the personal involvement of combat leaders. CSS planners must —

- Understand the commander's intent and priorities.
- Track and monitor the battle.
- Anticipate requirements and take action to meet them.
- Pre-position supplies and equipment.
- Actively push support forward.
- Seek windows of logistics opportunity.
- Use established routines during lulls in battle to rearm, refuel, and repair.
- Detect, fix, and destroy rear area threats within capabilities.

Section I. BRIGADE COMBAT SERVICE SUPPORT SYSTEM

The brigade CSS participants are TF trains, the FSB, and division and corps support units. Unit-level CSS for the divisional brigade is organic to its headquarters company and its attached maneuver battalions.

BRIGADE SUPPORT AREA

The BSA is the personnel and logistics hub of the maneuver brigade. It includes the brigade rear CP;

FSB; selected COSCOM elements; field trains of subordinate maneuver, DS artillery, and engineer battalions; DS MPs; MI battalion elements; and part of the division extension signal platoon that supports the brigade.

The brigade S3 selects the location of the BSA based on recommendations of the FSB commander and the S4. The FSB commander positions battalion trains in the BSA.

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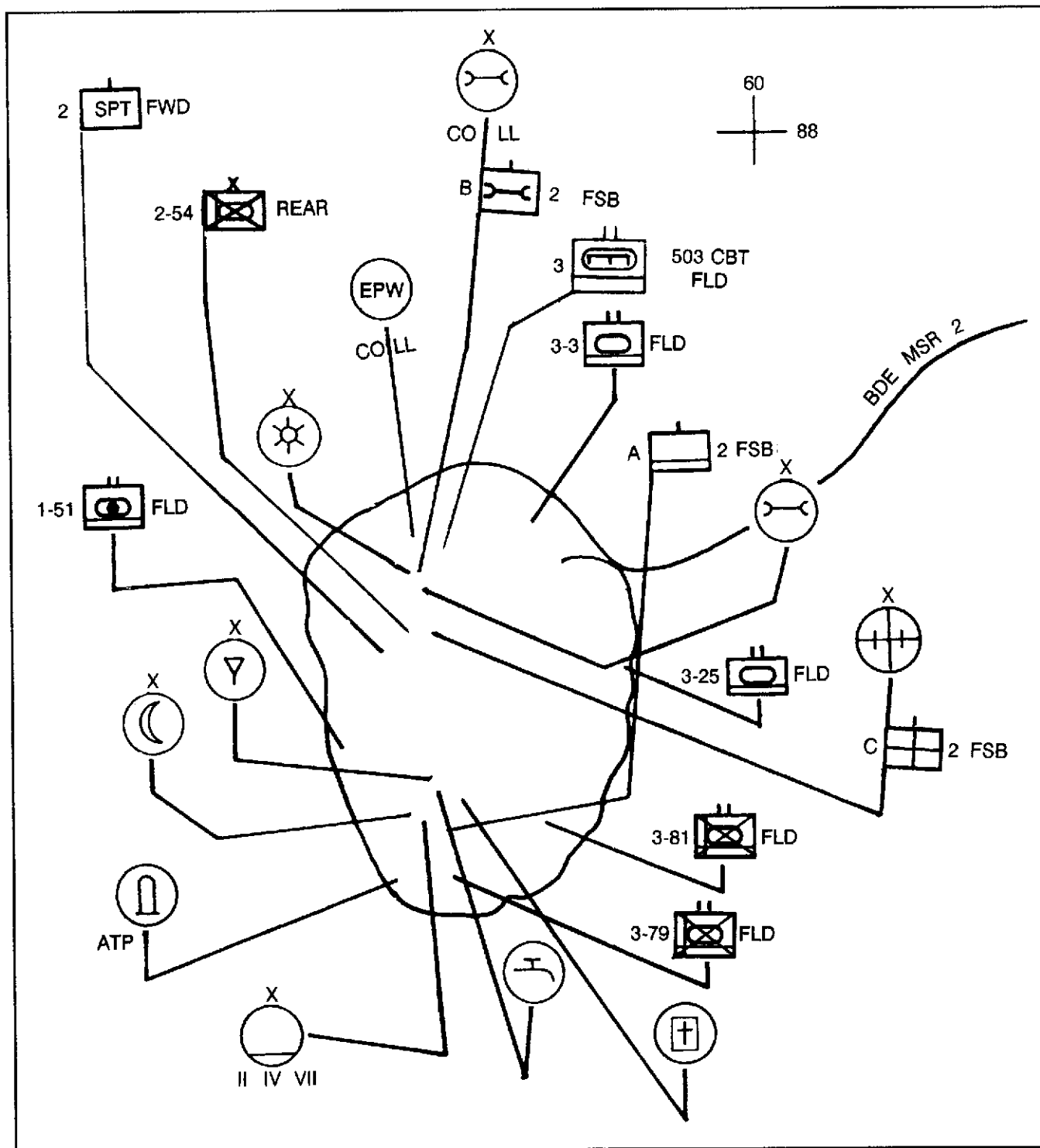


Figure 7-1. Possible BSA Organization.

The BSA rarely displaces as an entity; rather, its elements are normally echeloned to maintain continuous support. The exact composition of the echelons depends on the criticality of each type support required. Each echelon includes elements of the headquarters detachment and limited Classes III, V, VIII, and IX supply assets as well as medical and maintenance personnel.

The lifelines that connect the BSA and supported units are the brigade supply routes. Supply routes are based on the tactical plan selected by the brigade S4 and approved by the brigade S3.

Military police regulate traffic along the supply routes. Engineers repair route damage to facilitate delivery of supplies forward. Alternate routes are planned and reconnoitered to minimize delays. Host-nation support may be used to repair roadways when engineers are unavailable.

BRIGADE COMMANDER, FSB COMMANDER, AND STAFF INTERFACE

The brigade commander is responsible for overall planning and integration of all aspects of brigade operations including CSS in the brigade area of operations. The brigade S1 and S4 prepare estimates that identify logistics strengths and weaknesses of tactical courses of action and identify the personnel and logistics requirements of the tactical plan. A key element in their staff planning is the CSS information they gain through coordination with the support operations element of the FSB. The FSB is in DS of the brigade. Thus, the FSB receives and executes missions—consistent with its capabilities—directly on call from and gives priority of support to the brigade. The FSB commander marshals and synchronizes the CSS assets needed to support the brigade plan. Whenever possible, he should be included in the planning process and order briefing.

CSS Planning

CSS planning analyzes the requirements of the brigade during all phases of an operation. The staff planning process must consider the supportability of the proposed courses of action. Once the brigade concept of the operation is determined, CSS planning focuses on

supporting it. See FM 63-20 for a detailed discussion of CSS planning.

Supporting the Offense

The availability of adequate supplies and transportation to sustain the operation becomes more critical as the operation progresses. Supply lines and communications are strained, and requirements for repair and replacement of weapon systems mount. NBC contamination on the battlefield compounds these problems and degrades the performance of CSS units. CSS commanders and planners must anticipate these problems and ensure these considerations are included in their planning. During offensive planning, CSS considerations include—

- Forward positioning of essential CSS such as ammunition, POL, and maintenance, preferably at night.
- Increased consumption of POL (terrain is a major factor).
- Using preplanned and preconfigured push packages of essential items including water, Classes III and V supplies, and decontamination and MOPP gear.
- Using throughput distribution whenever feasible.
- Attaching CSS elements to supported maneuver units; however, CSS elements should be as mobile as the units they support.
- Echeloning support forward and initiating operations at the new site before ceasing operations at the old site.
- Using captured enemy supplies and equipment, particularly vehicles and POL.
- Planning for adequate communications between tactical and CSS units.
- Preparing for increased casualties and requirements.
- Uploading as much materiel as possible.
- Ensuring that CSS preparations for the attack do not give away tactical plans.

- Coordinating real estate management to preclude attempted occupation by more than one unit.
- Planning for transition to the defense.

Supporting the Defense

The aims of CSS activities in the defense are to support defensive battles and facilitate rapid transition to the offense. Defensive operations take many forms. They range from absolutely static, relying on firepower from fixed positions, to wholly dynamic, based on maneuver to disrupt and destroy the attacking force. CSS commanders must be involved early in defensive planning. This allows them to plan support for the defense and to anticipate changing priorities. To support the defense, the FSB should—

- Consider stockpiling limited amounts of ammunition and POL in centrally located battle positions in the forward MBA that are likely to be occupied.
- Have the FSB TOC monitor and track the ongoing battle to anticipate CSS requirements.
- Institute a C2 plan for CSS vehicles in the brigade area.
- Send forward push packages of critically needed supplies on a scheduled basis. These regular shipments of ammunition, POL, and repair parts to the combat trains help eliminate the need to call for supplies repeatedly. They reduce the chance that a lapse in communications will interrupt supply. Resupply continues until the receiving unit issues instructions to the contrary.
- Resupply during periods of limited visibility to reduce the chances of enemy interference.
- Dispatch maintenance support teams (MST) far forward to reduce the need to evacuate equipment.
- Consolidate different types of MSTs to maximize the use of available personnel and vehicles.
- Consider providing the security force with prepositioned stocks of critical supplies in subsequent defensive positions throughout the security force area. Air delivery of supplies should be routine to take advantage of the helicopters' lift capabilities and flexibility.
- Plan for increased demand of decontaminants and MOPP gear.
- Plan for high expenditures of ammunition.
- Plan for decreased vehicle maintenance.
- Plan for increased demand for obstacle and fortification materials. These materials should be pushed forward early based on preliminary estimates.
- Establish ambulance exchange points for efficient use of ambulances.
- Plan for ADA coverage consistent with AD priorities, with emphasis on passive AD measures.
- Coordinate with civil affairs personnel concerning refugee control and CSS requirements.

Support for Retrograde Operations

CSS for retrograde operations is particularly complex because many activities may be taking place concurrently. Maneuver units at any given time may be defending, delaying, attacking, or withdrawing. All must be supported under the overall retrograde operation. Since the retrograde is a movement away from the enemy, CSS elements must be prepared to—

- Echelon in depth and rearward.
- Limit the flow of supplies forward to only the most essential positions. All other supplies and equipment are evacuated early.
- Evacuate supplies and equipment to planned fallback points along the withdrawal routes.
- Keep supply and evacuation routes open and decontaminated.
- Withdraw forward medical treatment units as early as possible.
- Evacuate patients early, develop alternate means of evacuation, and augment field ambulance capabilities when possible.
- Recover or evacuate equipment rather than risk being overrun while repairing at forward sites. Recovery personnel can use tanks and other fighting vehicles in which weapon systems are inoperable to tow other vehicles with inoperable motor systems.

- Move all nonessential CSS units and facilities to the rear as early as possible.
- Supply and evacuate at night and during other periods of limited visibility.
- Implement the division commander's policy of controlled exchange.
- Maintain full knowledge of the current tactical situation.

Section II. FORWARD SUPPORT BATTALION

The FSB commander is the brigade commander's CSS operator. Each FSB provides dedicated DS-level logistics support for a specific maneuver brigade in tactical operations and to all divisional units in the brigade area of operations.

The FSB is task organized by the DISCOM to support the division commander's scheme of maneuver and density and variety of units in the brigade area of operations. The FSB in turn task organizes its subordinate units to fulfill the needs of the brigade and of other divisional units in the area. Maintenance support, for example, is weighted to provide the tank, BFV, and artillery specialists necessary to support the brigade's task organization. The FSB then forms appropriate MSTs and provides them DS to the respective battalions, where they remain. Medical and supply capabilities are simultaneously reinforced by the DISCOM when the mission or other requirements dictate. The guiding concept is to push the support as far forward as possible to facilitate tactical operations.

The FSB is the brigade's central conduit for all classes of supply as well as water and unclassified maps. It also provides DS-level maintenance, health services, field services, and materiel collection and classification. The FSB staff coordinates all operations in the BSA. It plans, organizes, and conducts rear operations in the BSA. The FSB is also responsible for the subordinate elements located in the brigade's rear but not physically in the BSA, such as a forward Class III supply distribution point.

Along with the rear CP, the FSB monitors the size, location, and CSS requirements of all units in the brigade area. The FSB commander is responsible for all division and corps logistics augmentation to the FSB. No ground unit may enter the brigade area without a representative reporting to the brigade rear CP and the FSB TOC to coordinate routes, terrain, communications, and CSS. The rear CP contacts the main CP to confirm the operational aspects of the coordination.

Section III. BRIGADE TRAINS OPERATIONS

The brigade uses a system of combat and field trains to provide unit-level CSS for its maneuver units. Trains are organic to the maneuver TFs and are organized and equipped to provide support well forward.

The FSB provides logistics and health services support to the battalion TF field trains, which are normally located in the BSA. The battalion TF field trains, supervised by the HHC commander, support the battalion TF and subordinate company team trains. When battalion

field trains operate from the BSA, they are OPCON to the FSB commander for positioning and defense. Although they may be DS, GS, or OPCON to the brigade, supporting units may be provided CSS assistance if it is coordinated by brigade rear CP. The brigade may also task a subordinate unit to provide support. The subordinate battalion's trains must be augmented with additional Classes III and V vehicles and MSTs to accomplish additional support requirements.

Section IV. RECONSTITUTION

Reconstitution tasks include reestablishment or reinforcement of C2; cross-leveling or replacement of personnel, supplies, and equipment using command priorities to allocate resources; conduct of essential training; and reestablishment of unit cohesion.

Reconstitution may be required for any unit and must be anticipated at all levels of command. Commanders have two reconstitution options—reorganization and regeneration—for returning units to a specified level of combat capability.

Reorganization shifts internal resources within a degraded unit. This option may be immediate battlefield or deliberate reorganization. Both forms include cross-leveling of equipment and personnel, matching of operational weapon systems with crews, or formation of composite units by the unit commander. Reorganization is the most expedient means of maintaining combat

power for the brigade; however, it is limited to the resources on hand.

Regeneration is either incremental or whole-unit. It involves the rebuilding of a unit through large-scale replacement of personnel, equipment, and supplies; replacement or reestablishment of C2; and mission-essential training for the rebuilt unit.

The brigade commander evaluates his units during the course of the battle and decides whether a unit needs reconstitution.

Authority for reorganization is maintained by the commander one echelon above; for regeneration, authority comes from two levels above. For example, the brigade can reorganize a battalion after approval from division and can regenerate a company on its own authority under normal circumstances.

Section V. SUPPORT FOR DEEP OPERATIONS

The brigade conducts deep maneuver as part of the division or corps deep attack. Deep maneuver is an audacious, high-speed, short-duration operation. CSS is austere. Brigade units carry as much Classes III and V supplies as possible, using captured enemy stocks when available and doing without where necessary. Once across the FLOT, only limited, emergency aerial resupply and evacuation are feasible, and even that is unreliable. Damaged equipment unable to maintain the pace of the operation will be abandoned and destroyed.

There are two options during deep maneuvers in maintaining CSS to the brigade. The FSB can accompany the brigade with the minimum assets to haul Classes III and V supplies. With this option, the FSB folds the brigade movement formation, protected by adjacent combat elements and the inherent security

offered by speed of movement. This method allows the brigade commander flexibility. He can assign CSS after operations begin and have support well forward when critically required.

The less complicated second alternative is to augment the maneuver battalions with Classes III and V supply assets from the FSB. Each battalion then supports itself with its organic and attached assets. This increases speed of resupply and security, thus enhancing decentralization.

These options assume that an open, secure MSR will not be available during the deep maneuver. Once an MSR is available, remaining FSB assets must be in a position and state of readiness to immediately resupply and regenerate combat power.

Section VI. AERIAL RESUPPLY

Aviation from corps or division may provide transportation of supplies, materiel, and personnel in support of brigade operations.

Higher headquarters decide whether to use aviation in resupply operations based on the urgency of the requirement and the availability of aviation assets. Requests for aerial resupply are processed through supply channels to the division G4.

If aerial resupply is used, the agency at the point of origin of the airlift is responsible for obtaining the required packing, shipping, and sling-load equipment; preparing the load for transportation by air; preparing the pickup zone; and conducting air loading operations.

The unit at the destination of the airlift is responsible for preparing the LZ to accommodate aerial resupply and for receiving the load.

Section VII. LOGISTICS SUPPORT OF THE SEPARATE BRIGADE

The logistics support structure of the separate brigade is designed to link into a COSCOM. In this respect, the separate brigade support battalion more closely resembles a small division support command than a large FSB. The direct linkage between the separate brigade support battalion and the COSCOM is not cut, even when the separate brigade is attached to a division. Corps augmentation to the separate brigade support battalion remains in place since the division does not have the resources to support another brigade.

When the brigade is attached to a division, the DISCOM coordinates the logistics effort for the entire division. The DISCOM ensures the separate brigade is neither specially favored nor penalized because of its distinctive characteristics. Because the attachment of the separate brigade to a division is not permanent, logistics arrangements should facilitate the eventual decoupling of the brigade from the DISCOM.

APPENDIX

HEAVY/LIGHT FORCES

While armor and mechanized infantry are designed primarily for mid- and high-intensity combat, operations are restricted in urban areas, forests, and mountains. In these environments, it is tactically advantageous to use light units. A mix of heavy and light units increases the tactical capability of the force and frees heavy units for decisive actions. This appendix focuses on the heavy brigade's considerations in planning and conducting tactical operations within a heavy/light force. The scope is limited to heavy units from armor and mechanized infantry divisional or separate brigades and light units from airborne, air assault, light infantry, and infantry divisions. Discussions focus on the heavy brigade operating within a heavy/light force in one of two situations: a heavy brigade task organized to a light division or a heavy brigade to which a light battalion has been task organized.

Division and corps commanders consider the following when planning heavy/light operations:

- Divisions normally task organize brigade-size

heavy/light units; task organization can be done at lower levels if METT-T dictates.

- Light battalions may augment heavy brigades for specific missions.
- Light brigades may augment heavy divisions for indefinite periods.
- The integrity of light units must be maintained. They are not used to alleviate dismount strength weaknesses of the heavy unit.
- The need for CS and CSS augmentation of a light unit may conflict with the need to concentrate CS and CSS at the main effort.
- Brigades should arrive at division task organized for the mission with CS and CSS.
- Avoid task organizing a heavy brigade to a light division.

Section I. COMMAND AND CONTROL

The corps commander creates the heavy/light force when he task organizes his divisions. Cross-attaching of

heavy and light units below brigade level is not recommended because of command and control and CSS

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difficulties; however, if cross-attaching below brigade level is required, it should be for a specific mission or a short duration (three days or less).

When task organizing, the corps commander must decide whether to make the command relationship one of attachment or OPCON. The general rule for determining the command relationship is to place a heavy brigade OPCON to a light division and to attach a light battalion to the heavy brigade.

A separate brigade is the preferred unit to place OPCON to a light division. Since it has integral CS and CSS assets and normally receives its CSS from corps, a separate heavy brigade can be placed OPCON to a light division for a long duration.

If a divisional heavy brigade is placed under the control of a light division for a short duration and for a specific mission, OPCON is the proper command relationship. This allows the light division to control the heavy brigade but not become overburdened with support operations. Corps is responsible for supporting the heavy brigade OPCON to a light division even though the heavy brigade must receive some of its support from its parent division.

The attachment of a heavy brigade to a light division is rare. When a heavy brigade is attached to a light division, corps must augment the light division with CS and CSS units.

When a heavy brigade is task organized with a light battalion, the proper relationship is attachment. This

arrangement should be for a specific mission or short duration only.

Command and control procedures do not change when a heavy/light force is formed; however, the commanders and staff in a heavy/light force must address the challenges of controlling units with different techniques, weapons, mobility, communications equipment, and support requirements.

The different force structures of heavy and light units require unique intelligence requirements for each. Differences in the size of friendly forces, ranges and types of weapons, and battlefield mobility require special IPB planning considerations. The inherent mobility of the heavy brigade, together with its organic firepower, makes it relatively easy for mechanized and armored brigades to accept risk, disperse, and then rapidly concentrate at the decisive point on the battlefield. The light infantry battalion does not have a rapid movement capability; it must have detailed knowledge of the enemy before and during an operation to reduce risk. The area of operations for the light battalion must be limited to the points on the battlefield where it has decisive advantage. When augmented with helicopters, light infantry can increase the scope and tempo of its operation and extend its area of operation deep into the enemy's formation. Missions that require the air insertion of light battalions and subsequent linkup operations must be specific in nature and limited in duration. In any case, detailed intelligence is paramount to the success of heavy/light integration.

Section II. COMBAT SUPPORT

Combat support planning in a heavy/light force must balance the needs of the attached light battalion with the requirement to fully resource the brigade main effort. The CS ability of the light battalion is limited to the parent unit's capability to support. The light battalion does not deploy with the normal slice of such assets as IEW and engineers when cross-attached

to the heavy brigade. The reason is that the light division base is very austere and not designed to support detached battalions. Therefore, the heavy brigade that has a light battalion attached must plan to provide CS as required, particularly antiarmor capability such as scatterable mines and DPICM. See FM 7-72 for specific details.

Section III. COMBAT SERVICE SUPPORT

In a heavy/light force, CSS is one of the most difficult functions to plan and execute. The heavy brigade must overcome differences in CSS capabilities

and requirements among the different types of light divisions. For example, the light infantry division has very austere and limited service support capabilities,

while the air assault division has a larger capability. In general, all different types of light divisions have difficulty supporting a heavy brigade, and all light battalions attached to a heavy brigade require support different from the support requirements of a heavy battalion.

Attachment of a heavy brigade to a light division will occur rarely because of the many CSS problems that this command relationship creates. The light division's organic CSS structure cannot support the heavy brigade without corps augmentation, particularly in the areas of fuel, ammunition, and repair parts. Maintenance support for the heavy force is difficult for light divisions because they do not have maintenance personnel or authorized stockage list to support armored vehicles.

Also, light infantry division maintenance support is based on a maintenance exchange concept, while the heavy brigade uses a repair parts concept. The corps commander must augment the light division with CSS units to provide support for an attached divisional heavy brigade.

The heavy brigade can support the attachment of a light battalion; however, it must prepare for an increased demand for exchange of major end items as opposed to issuance of repair parts. Also, light units require resupply for some items that the heavy brigade does not stock. The light battalion requires additional transportation to push supplies forward to its combat trains.

Section IV. OFFENSIVE OPERATIONS

The basic considerations for offensive operations as outlined in Chapter 3, *Offensive Operations*, are applicable to offensive operations in a heavy/light force. Heavy and light forces both fix and maneuver. Brigade offensive operations are planned to use light units to fix an enemy force in restrictive terrain while the heavy brigade maneuvers to attack the enemy force. Conversely, the heavy brigade may fix the enemy while a light unit maneuvers against the enemy on an avenue of approach through restrictive terrain. If helicopter support is available, the light unit can conduct an air assault operation against the enemy.

Light units may attack to create a penetration through which the heavy brigade can pass. By attacking during periods of limited visibility and from an unexpected direction, the light unit can overpower an entrenched enemy force (see Figure A-1). It can attack the enemy's command and control, combat support, and combat service support units to aid the subsequent attack by the heavy brigade. It can attack to seize a blocking position or be oriented either to stop enemy

reinforcements or to prevent the retreat of the enemy's front-line troops. The light force may be ordered to seize a choke point to deny it to the enemy and to assist the forward maneuver of the heavy brigade.

The early air assault of light units into the enemy's rear can disrupt its defense and cause the enemy to fight in two directions. An air assault into a secondary objective, either simultaneous with or after the main effort, can be used to mask the intent of the heavy brigade's primary objective.

An attached light battalion can plan and execute an air assault operation, but the heavy brigade staff must be prepared to support the planning process. The supporting aviation commander, S3, or ALO and light battalion's S3 or S3 air are part of the planning process. See FM 90-4 for a more detailed discussion of the planning for air assault operations.

In addition to planning air assault operations, heavy brigades receive more requests for aerial resupply and evacuation of wounded when light forces are attached. The division and heavy brigade commanders must anticipate this requirement.

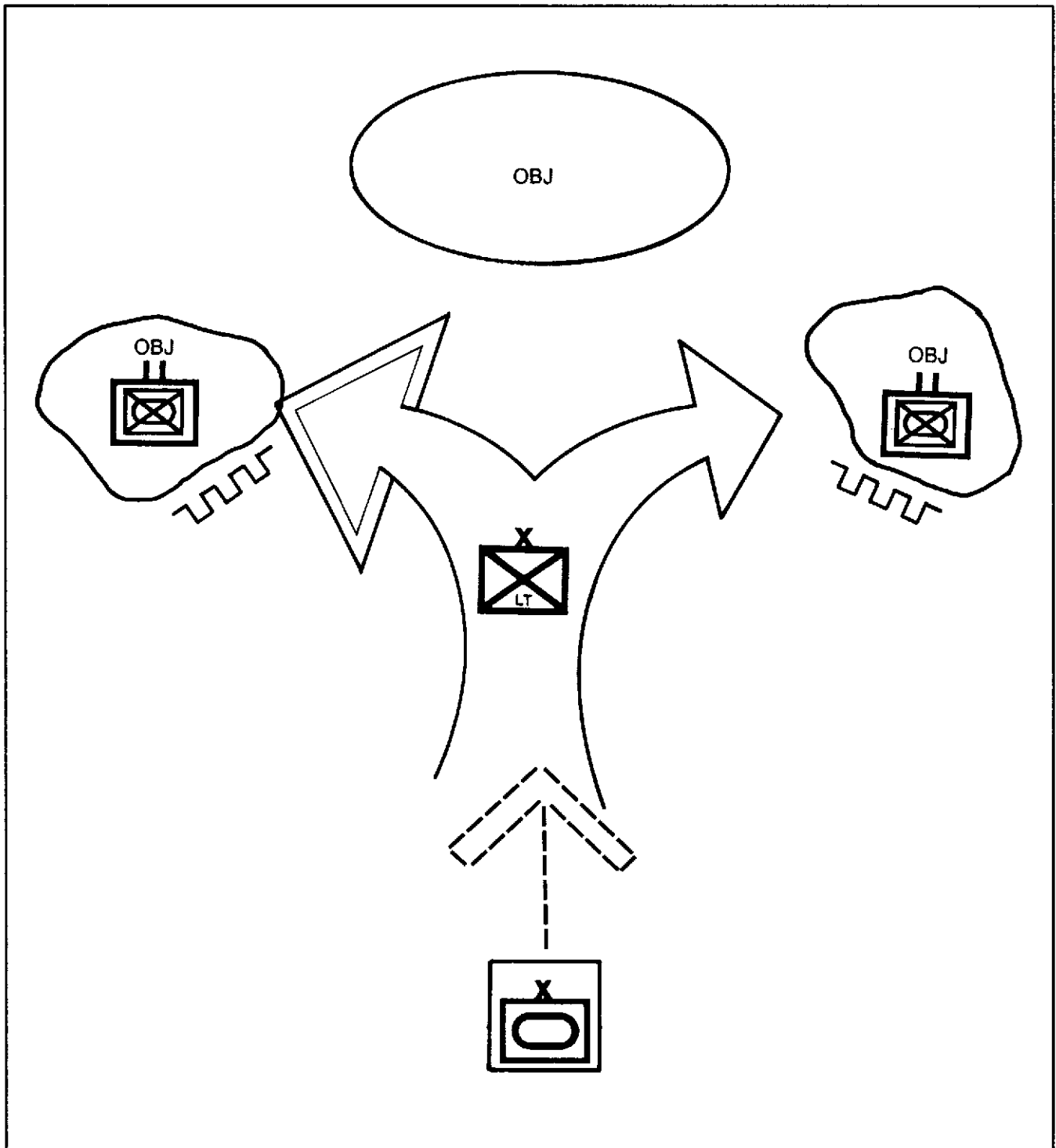


Figure A-1. Heavy/Light Penetration of an Enemy Defensive Position.

Section V. DEFENSIVE OPERATIONS

The basic considerations for defensive operations outlined in Chapter 4, *Defensive Operations*, are applicable to a heavy/light force. The heavy brigade defends in conjunction with a light unit's defense along the FEBA as a flank unit, a covering force, or a unit positioned in depth. The heavy brigade keeps its

freedom to maneuver units, while the light unit emplaces its force to best use restrictive terrain to gain a mobility advantage over mounted forces. The light unit's defensive sector must stay within restrictive terrain, which often does not extend as far rearward as a heavy unit's rear boundary.

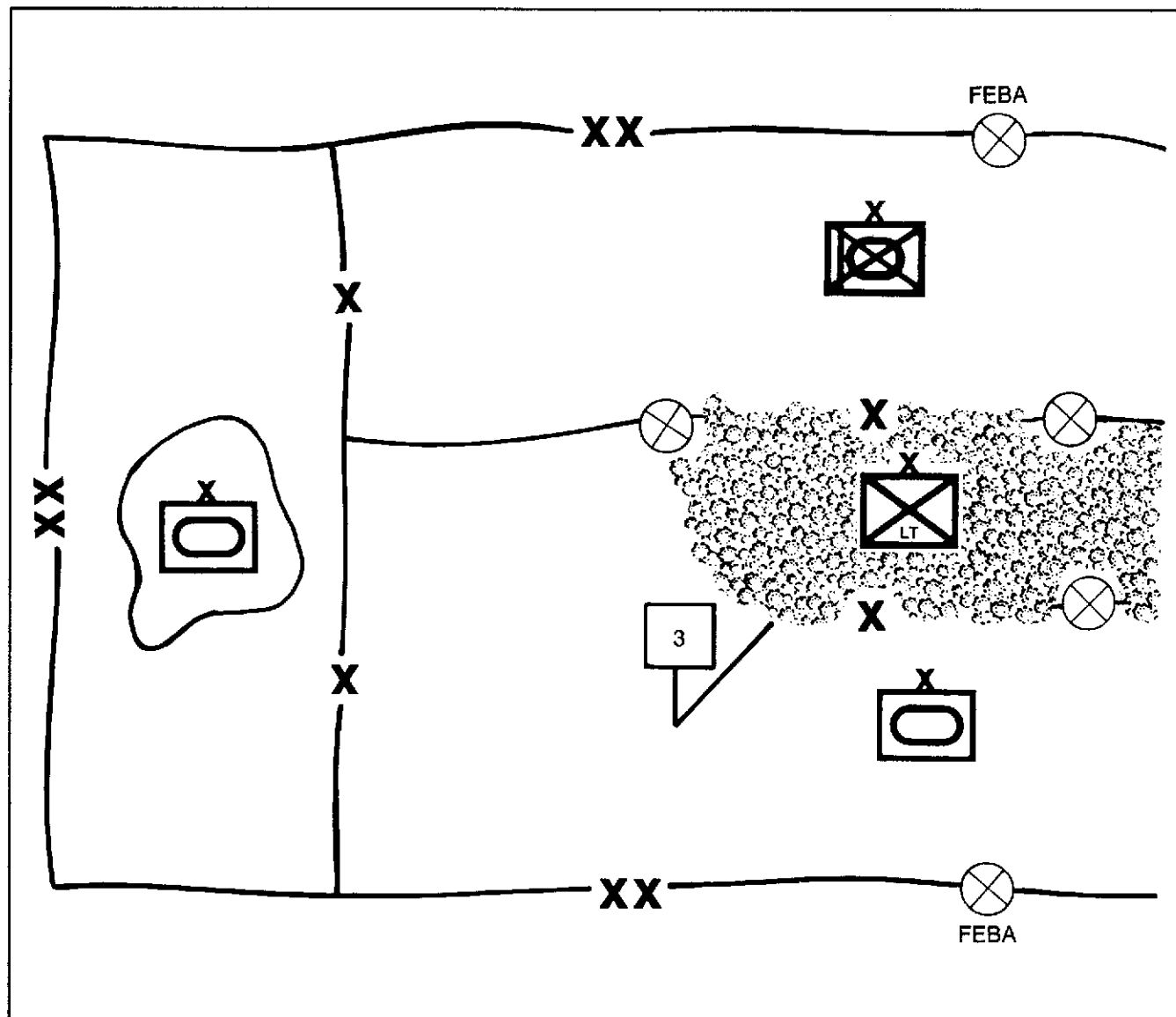


Figure A-2. Heavy and Light Brigades Defend in Sector.

A heavy brigade in a covering force role forward of a light unit defends as outlined in Chapter 4, *Defensive Operations*. Battle hand-over to the light unit must be carefully planned to account for the relative scarcity of direct-fire overwatch weapons in the light unit inside the BHL. Heavy units must assume a greater role in overwatching themselves as they pass through the position of the light unit.

The heavy force can be positioned in depth behind the light unit's defense. The light unit's forward deployment shapes the battlefield for decisive action by the heavy brigade. The light unit denies the enemy use of restricted terrain while leaving open an avenue of approach into the EAs of the heavy unit. If the enemy penetrates the light unit, the heavy brigade destroys the enemy by counterattack. The light unit supports the counterattack by identifying the location of the enemy's main effort, continuing to slow the enemy's advance, and destroying its command and control and combat support elements. To achieve surprise on the enemy's

flank, the counterattacking force may move through restrictive terrain, guided by light units.

The enemy may cut off the light force from the heavy force. This situation must be anticipated and plans developed. The basic considerations for exfiltration, breakout of encircled forces, and linkup operations outlined in Chapter 5, *Other Tactical Operations*, are applicable to this situation. Ground transportation assets of the heavy unit may be tasked to support this movement. The heavy/light commander must also consider the range of indirect-fire support of the light unit that has been cut off. It may be necessary to give the light brigade priority of fire from artillery systems that normally support the heavy brigade. The light unit may be able to take advantage of terrain to occupy a hide position as a stay-behind force. The light units could then counterattack echeloned enemy combat forces from the rear or attack enemy command and control, combat support, and combat service support elements.

GLOSSARY

A2C2	Army airspace command and control
AA	assembly area
AD	air defense
ADA	air defense artillery
ALO	air liaison officer
alt	alternate
AO	area of operations
ATGM	antitank guided missile
atk	attack
ATKHB	attack helicopter battalion
ATP	ammunition transfer point
Aug	August
AVLB	armored vehicle launched bridge
BAI	battlefield air interdiction
BCC	battlefield circulation control
bde	brigade
BFV	Bradley fighting vehicle
BHL	battle handover line
BICC	battlefield information control center
bn	battalion
BSA	brigade support area
C2	command and control
C3	command, control, and communications
C3CM	command, control, and communications countermeasures
C3I	command, control, communications, and intelligence
CAS	close air support
cav	cavalry
CDR	commander
CE	Communications-Electronics
CFL	coordinated fire line
CHEMWARN	chemical warning
CI	counterintelligence
CINC	Commander in Chief
C&J	communications and jamming
co	company
COMSEC	communications security

COO	combined obstacles overlay
COSCOM	corps support command
CP	command post
CS	combat support
CSM	Command Sergeant Major
CSS	combat service support
CW	chemical weapons
DAG	Division Artillery Group (threat forces)
decon	decontamination
demo	demolition
deploy	deployment
DISCOM	division support command
div	division
DIVARTY	division artillery
DP	decision point
DPICM	dual-purpose improved conventional munition
DS	direct support
DST	decision support template
DTG	date-time group
DZ	drop zone
EA	engagement area
EEFI	essential elements of friendly information
engr	engineer
EPW	enemy prisoner of war
equip	equipment
evac	evacuation
EW	electronic warfare
FA	field artillery
FAAR	forward area alerting radar
FARP	forward arming and refueling point
FASCAM	family of scatterable mines
FEBA	forward edge of the battle area
FLOT	forward line of own troops
FM	field manual; frequency modulated
FPF	final protective fires
FRAGO	fragmentary order
FSB	forward support battalion
FSCoord	fire support coordinator

FSE	fire support element
FSO	fire support officer
fwd	forward
G2	Assistant Chief of Staff (Intelligence)
G3	Assistant Chief of Staff (Operations and Plans)
G4	Assistant Chief of Staff (Logistics)
GP	general purpose
GS	general support
GSR	ground surveillance radar
H	hour
HE	high explosive
HHC	headquarters and headquarters company
hrs	hours
HVT	high-value targets
ICM	improved capabilities missile
IDP	initial delay position
IEW	intelligence and electronic warfare
IEWSE	intelligence and electronic warfare support element
IG	inspector general
IPB	intelligence preparation of the battlefield
IR	information requirement
JAAT	joint air attack team
JAG	judge advocate general
km	kilometer(s)
LC	line of contact
LD	line of departure
LD/LC	line of departure is line of contact
LO	liaison officer
LOGPAC	logistics package
LZ	landing zone
maint	maintenance
MANPADS	man-portable air defense systems
MBA	main battle area
mech	mechanized

METT-T	mission, enemy, terrain (includes weather), troops, and time available
MI	military intelligence
min	minute
mob	mobilize
MOPP	mission-oriented protective posture
MP	military police
MSE	multi-subscriber equipment
MSR	main supply route
MSRT	mobile subscribers radio telephone
MST	maintenance support team
NAI	named area of interest
NBC	nuclear, biological, chemical
NCA	National Command Authority
NGF	naval gunfire
NRI	net radio interface
NUCWAR	nuclear warning
obj	objective
OCOKA	observation and fields of fire, cover and concealment, obstacles, key terrain, and avenues of approach
OO	on order
OP	observation post
OPCON	operational control
OPLAN	operation plan
opns	operations
OPORD	operation order
OPSEC	operations security
PAO	public affairs office(r)
PIR	priority intelligence requirement
PL	phase line
POL	petroleum, oils and lubricants
PP	passage point
prov	provisional
PSYOPS	psychological operations
RAG	Regimental Artillery Group (threat forces)
RATT	radio teletypewriter
RAU	radio access unit
recon	reconnaissance

regt	regiment
res	reserve(s)
RFL	restrictive fire line
RP	release point (ground traffic)
rte	route
S1	Adjutant (U.S. Army)
S2	Intelligence Officer (U.S. Army)
S3	Operations and Training Officer (U.S. Army)
S4	Supply Officer (U.S. Army)
S5	Civil Affairs Officer (U.S. Army)
S	scatterable
SEAD	suppression of enemy air defenses
SHORAD	short-range air defense
SITMAP	situation map
SOP	standing operating procedure
SP	start point
spt	support
STANAG	Standardization Agreement
SWO	staff weather officer
TAC CP	tactical command post
TACP	tactical air control party
TAI	target area of interest
TF	task force
TOC	tactical operations center
TOE	table(s) of organization and equipment
TVA	target value analysis
UMCP	unit maintenance collection point
U.S.	United States (of America)
USAF	United States Air Force
VEESS	vehicle engine exhaust smoke system
VT	variable time
XO	executive officer

REFERENCES

For current publications, changes, and supersessions, check DA Pamphlet 25-30 or other references as indicated.

REQUIRED PUBLICATIONS

Required publications are sources that users must read to understand or to comply with this publication.

FIELD MANUALS (FM)

1-100	Combat Aviation Operations
3-5	NBC Decontamination
3-50	Deliberate Smoke Operations
3-100	NBC Operations
5-100	Engineer Combat Operations
5-101	Mobility
5-102	Countermobility
5-103	Survivability
6-20	Fire Support in Combined Arms Operations
7-72	Light Infantry Battalion
8-15	Medical Support in Divisions, Separate Brigades, and the Armored Cavalry Regiment
12-3-2	Division/Separate Brigade Personnel and Administrative Doctrine
12-15	Wartime Casualty Reporting
12-16	Replacement Operations
17-95	Cavalry Operations
19-1	Military Police Support for the AirLand Battle
19-4	Military Police Team, Squad, Platoon Combat Operations
24-1	Combat Communications
34-3	Intelligence Analysis
34-80	Brigade and Battalion Intelligence and Electronic Warfare Operations
44-1	U.S. Army Air Defense Artillery Employment
44-3	Air Defense Artillery Employment: Chaparral/Vulcan/Stinger
44-16	Chaparral/Vulcan/Stinger Platoon Combat Operations
63-2	Combat Service Support Operations— Division (How to Support)
63-20	Forward Support Battalion
71-1	Tank and Mechanized Infantry Company Team
71-2	The Tank and Mechanized Infantry Battalion Task Force

71-100	Armored and Mechanized Division Operations
71-101	Infantry, Airborne, and Air Assault Division Operations
90-4	Air Assault Operations
90-13	River Crossing Operations
90-14	Rear Battle
100-1	The Army
100-2-1	Soviet Army Operations and Tactics
100-2-2	Soviet Army Specialized Warfare and Rear Area Support
100-2-3	The Soviet Army Troops Organization and Equipment
100-5	Operations
100-10	Combat Service Support (How to Support)
100-15 (TEST)	Larger Unit Operations
100-26	The Air-ground Operations System
101-5	Staff Organization and Operations
101-5-1	Operational Terms and Symbols
101-10-2	Staff Officers' Field Manual; Organizational, Technical, and Logistical Data

STANDARDIZATION AGREEMENTS (STANAG)

2014	Operation Orders, Warning Orders and Administration/Logistics Orders
2029	Method of Describing Ground Locations, Areas and Boundaries
2031	Proforma for Artillery Fire Plan
2041	Operation Orders, Tables and Graphs for Road Movement
2099	Fire Coordination in Support of Land Forces
2147	Target Numbering System (Non-nuclear)
2355	Procedures for the Employment of Helicopters in the Anti-armour Role
2868	Land Force Tactical Doctrine – ATP-35(A)
2963	Coordination of Field Artillery Delivered Scatterable Mines

RELATED PUBLICATIONS

Related publications are sources of additional information. They are not required to understand this publication.

ARMY REGULATIONS (AR)

310-25	Dictionary of United States Army Terms (Short Title AD)
310-50	Authorized Abbreviations and Brevity Codes

DEPARTMENT OF THE ARMY FORMS (DA Form)

2028 Recommended Changes to Publications and Blank Forms

DEPARTMENT OF THE ARMY PAMPHLETS (DA Pam)

25-30 Consolidated Index of Army Publications and Blank Forms

FIELD MANUALS (FM)

3-3 NBC Contamination Avoidance (NAVPAC P-462)
 6-1 TACFIRE Operations
 7-20 The Infantry Battalion (Infantry, Airborne, and Air Assault)
 7-30 Infantry, Airborne, and Air Assault Brigade Operations
 34-1 Intelligence and Electronic Warfare Operations
 34-10 Division Intelligence and Electronics Warfare Operations
 44-8 Small Unit Self-defense Against Air Attack
 90-2 Tactical Deception

STANDARDIZATION AGREEMENTS (STANAG)

2019 Military Symbols for Land Based Systems – App-6
 2020 Operational Situation Reports
 2022 Intelligence Reports
 2036 Land Minefield Laying, Recording, Reporting, and Marking Procedures
 2047 Emergency Alarms of Hazard or Attack (NBC and Air Attack Only)
 2077 Order of Battle (Non-NATO Ground Forces)
 2079 Rear Area Security and Rear Area Damage Control
 2082 Relief of Combat Troops
 2088 Battlefield Illumination
 2096 Reporting Engineer Information in the Field
 2101 Establishing Liaison
 2103 Reporting Nuclear Detonations, Biological and Chemical Attacks, and Predicting and Warning of Associated Hazards and Hazard Areas – ATP-45
 2104 Friendly Nuclear Strike Warning
 2113 Destruction of Military Technical Equipment
 2154 Regulations for Military Motor Vehicle Movement by Road
 2889 Marking of Hazardous Areas and Routes Through Them
 2904 Airmobile Operations – ATP-41
 3204 Aeromedical Evacuation

3345	Data/Forms for Planning Air Movements
3700	NATO Tactical Air Doctrine – ATP-33(A)
3805	Doctrine and Procedures for Airspace Control in the Combat Zone

TRAINING CIRCULARS (TC)

12-16	Personnel and Administration Center (PAC) Drill Book
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COMMAND PUBLICATIONS

Command publications cannot be obtained through Armywide resupply channels. Determine availability by contacting the address shown. Field circulars expire three years from the date of publication, unless sooner rescinded.

FIELD CIRCULARS (FC)

5-100-1	Brigade/Task Force Engineer. October 1985. Commandant, U.S. Army Engineer School, ATTN: ATZA-TD-M, Fort Belvoir, VA 22060-5291.
6-20-20	Fire Support Handbook. October 1985. Commandant, U.S. Army Field Artillery School, ATTN: ATSF-DD, Fort Sill, OK 73503-5600.
71-6	Battalion and Brigade Command and Control. March 1985. Commandant, U.S. Army Infantry School, ATTN: ATSH-B-ID, Fort Benning, GA 31905-5416.
100-1-103	Army Airspace Command and Control in a Combat Zone. January 1985. Commander, U.S. Army Combined Arms Center and Fort Leavenworth, ATTN: ATZL-SWA-DL, Fort Leavenworth, KS 66027-6900.

OTHER PUBLICATIONS

The publications listed below are not indexed in DA Pamphlet 25-30 and therefore are not available through normal distribution channels. Determine availability by contacting the address shown.

OTHER SERVICES MANUALS

FLEET MARINE (FM)

7-2	Naval Gunfire Support. April 1981. Commandant of the Marine Corps, HQSP-2 HQUSMC, Washington, DC 20380-0001.
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FM 71-3
11 MAY 1988

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